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1992

AMERICAN INDIAN HEALTH PROFILE:

STATE OF MICHIGAN

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STATE OF MICHIGAN

BY

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CHAPTER I
ACKNOWLEDGMENTS

Many American Indian people contributed to the effort and planning that went into the project and must be recognized for their contributions to process as well as final product. Indian people have long valued process and group consensus, viewing problems from a broad wholistic perspective. Throughout the years of this project many new associations and linkages evolved, new pathways forged, new perspectives developed--all of which will provide a basis for continued dialogue and cooperation.

The span of time within which the project evolved covers a six to seven year period. People and organizations entered and exited the process during that time and we apologize if anyone who participated is not recognized in these acknowledgements. Having entered in 1990 we are limited to documents that preceded this final phase of the project. See Appendix C for participants in Phase I, and II.

Those especially instrumental in the data collection Phase (IIa) include Chester Eagleman, former Indian Health Coordinator, Office of Minority Health, Michigan Department of Public Health, Charlotte Hewitt, Director, Health and Human Services, Inter-tribal Council of Michigan, and Victoria Miller, Director, Saginaw Inter-tribal Association, Marie (Lucy) Harrison, Director of Detroit Indian Health Service, and Thelma Henry-Shipman, Michigan Department of Social Services, without whom the project would never have gotten off the ground floor. Their willingness to communicate and advise during the project was invaluable. The Michigan Indian Health Planning and Advisory Council

provided oversight and counsel under the chairmanship of Laurel Keenan. The membership of this council changed throughout the study period. (See Appendix C for membership lists.)

Bonita Brady provided invaluable consulting in the early phases of the study, recruiting American Indian interviewers, planning and conducting training sessions around the state.

Special thanks also to the thirty-nine American Indian interviewers who received training and conducted the 383 interviews across the state. (See Appendix C for individual names.)

A number of research assistants contributed to this report in many ways, including Sri Madabushi, Celeste Shaheed, Kelli Pugh and most importantly Mary Zambetis whose organizational and computer skills were invaluable; Chuck Fisher provided assistance in locating appropriate literature and co-authored the section on Health Risk Behaviors.

Last but not least, a special "megwetch" to the 383 respondents who shared information about 1240 household members' health conditions and needs. We trust that the information will promote and enhance policies and programs to improve the lives of all Michigan American Indians.

CHAPTER II
BACKGROUND AND INTRODUCTION

As state policymakers, tribal entities and Indian organizations plan for American Indian health improvement in Michigan, data are necessary to document information concerning need, access, attitudes, awareness and utilization of services. Native Americans in Michigan, and elsewhere, have been studied at length with little payback or feedback to the population studied. State health agencies have been unable to serve Native American people in a comprehensive, culturally sensitive manner for a myriad of reasons. First, there is no comprehensive, statewide database to provide information on the health needs and attitudes of American Indians; second, there is confusion on the parts of health providers at the tribal and governmental levels as to who is responsible for what, which often leaves whole pockets of people outside the delivery system; third, there is no forum for networking between all the actors needed to affect policy on a statewide basis or to redesign health services at the community level.

This report on the health status and needs of American Indians residing in Michigan serves as a foundation to guide in planning and policymaking for appropriate, culturally sensitive health services. It contains the most comprehensive up-to-date information on Indian health needs and attitudes ever collected in the state. The lists from which the frame was developed included over 11,000 households (approximately 30,000 people) located in urban, rural, and reservation settings. The goal was to interview 120 respondents from each of four strata: Federally Recognized Tribes (reservation residing), Rural (off-reservation) Areas, Wayne County, and Urban Areas outside Wayne County. Interviewing was conducted by trained

American Indians identified by tribes and organizations. It is a cooperative effort, both in planning and implementation, between Wayne State University, the Michigan Department of Public Health and, Saginaw Intertribal Association, tribes and community organizations.

Anishnabek - Michigan's First People

Michigan's Indians historically call themselves "the people of the three fires". The **Ojibway** (Chippewa), **Odawa** (Ottawa) and **Potawatomi** formed a loose federation which later assured them territorial control and protection from other indigenous groups. "Referring to themselves collectively as the **Anishnabek**, members of the Ottawa, Potawatomi and Ojibway groups spoke similar dialects of the same Algonquian language and shared many cultural beliefs. (Clifton, J. A. etal 1986) The early 1800s saw a number of treaties between the federal government and Michigan's indigenous people gradually reducing their remaining land and in 1992 there are seven federally-recognized tribes and six state historic tribes. (See Maps, Appendix C). While virtually all Michigan Indians are members of an original North American tribe, few actually live on reservations. Between 12 and 20 percent of Michigan's American Indians live on reservations and over half live in urban areas.

American Indians in Michigan are estimated to number anywhere between 55,368 (the census count in 1990) and over 100,000 (the Michigan Commission on Indian Affairs). See Appendix B for 1990 census counts of Michigan's Indians by county. Regardless of the magnitude of the undercount, they form one of the largest American Indian population east of the Mississippi. The 1990 Census shows that among states east of the Mississippi, only North Carolina (80,000) and New York (61,000) report larger American Indian populations.

(See Appendix B) Michigan's American Indian population places it tenth in ranking among all 50 states.

This project, which began in 1987, seeks to provide baseline data about the health conditions, beliefs and attitudes of Michigan's Indian families. Previous data collections have provided information for specific geographic areas or tribes. Many tribes have contracted for surveys of their own populations. The University of Michigan in 1981 published Health Care of Urban Indians in Michigan (Bashur 1981), a study that assessed health needs in Wayne County and later Genesee, Saginaw and Bay Counties. The most recent **statewide** effort to collect data on the social, economic and health conditions of Michigan's Indians was the Needs Assessment of Native American's 55 and Older (Chapleski, E.E. 1990). This study, commissioned by the Michigan Office of Services to the Aging, captured information in urban, rural and reservation settings on a sample of 206 Indian elders.

To our knowledge this is the first statewide health data collection that offers comparisons between Wayne County, other urban areas, rural off-reservation and reservation residing American Indian people of **all ages**.

Urban, Rural and Reservation Differences

Findings from the state Michigan Office of Services to the Aging study of older Indians support findings from other research of differences in need depending on the place of residence. Those living in suburban communities were more advantaged, while those in rural and urban areas were more disadvantaged, along many indicators of need, than their reservation-based peers. The rural off-reservation and the

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urban Indians were least likely to have any medical insurance, yet more likely to report serious health problems.

The stratification by area of residence for this 1992 health report offers invaluable information about not only the state aggregate but those who reside in environmental settings known to differ in access to and provision of services. However, the boundaries between urban, rural and reservation American Indians are not completely distinct since Indians who live in urban or rural communities most often maintain close ties with their tribes. Many return to reservation settings to seek services and some services are received through IHS contractual arrangements.

Any study of a culture should focus on the strengths as well as the problems of a population group. While Michigan Indians have the highest poverty rate among minorities and the most serious health problems, they exhibit many strengths. It is in looking to their strengths as well as their problems, that we will find solutions. Most Michigan Indians are roman catholic due to having been settled first by french catholic fur traders, but there is a remarkable resilency of traditional Indian spiritual beliefs and practices. The resurgence of their traditional beliefs, including respect for their elders, "wellness" and being in harmony with one's environment, has real potential to change behaviors that will improve health. Furthermore, some governmental agencies that serve indigenous people have shown a willingness to integrate medical model service delivery practices with more traditional belief systems.

CHAPTER III
SAMPLE AND METHODS

Background and History of Design

Both the recommended target population and survey instrument were developed in a previous phase of this project, under a contract between the Office of Minority Health, Michigan Department of Public Health (MDPH) and the Saginaw Inter-Tribal Association (SITA), who subcontracted with the American Indian Law Center (AILC) in 1987 to conduct the project.

The document entitled Michigan Indian Health Needs Assessment: Design Document and Pilot Test Report (AILC, 1990) (May 1990) is the source from which this background and history is taken. Working closely with the Indian Health Planning and Advisory Council, the AILC developed objectives of the study, the content and structure of the study and an instrument that was pilot tested.

Following the contract with Wayne State University in October 1990 to conduct the survey phase and develop the sample, the instrument was partially revised in both format and content and once again pilot tested and approved by the Advisory Committee.

Target Population

The AILC document described the proposed target population as consisting of the following groups: Federally recognized tribes in the State; State recognized tribes; urban Indian communities served by Urban Indian Centers; and other Indian communities or settlements. Furthermore, Wayne County was

to form its own strata, making five strata in all. However, the difficulty in reaching those American Indians who do not live on or near reservations, was recognized. Furthermore in developing a sampling frame based on these target groups, there was no clear distinction between tribal affiliation and geographic location. Indeed, AILC warned that care should be taken to avoid overlapping strata because five of the rural communities were located either in Federally recognized or state-recognized tribal catchment counties.

Another problem in carrying out the five-strata plan arose because the Confederation of State Historic Tribes was given permission to survey their own stratum, using the developed instrument, with the hope of merging their data with the statewide data once they were collected. This could not be implemented as planned for a number of reasons including the fact that the instrument they fielded was too different in terms of formatting and content to be merged. The overlap of locales and lists that formed the sampling frame required inclusion of members of state historic tribes in the statewide sample frame in order to be able to generalize to the entire state. Therefore, Chet Eagleman and Elizabeth Chapleski, attended Confederation meetings and gained permission to request State Historic Tribe's lists for inclusion in the frame.

Sample Size and Sampling Error

The final design plan included 4 geographically distinct strata of sample sizes in the 100 to 120 range and a total sample size of between 400 and 480. The strata design was as follows:

- Federally-recognized Reservation (and 30 mile radius)

- Urban (Pontiac, Warren, Flint, Grand Rapids,
        Saginaw, Bay City, Lansing, Battle Creek,
        Kalamazoo)
- Rural   (more than 30 miles from a reservation)
- Wayne County

Decisions as to strata and size were made in terms of precision required and costs allowed. For the statewide analysis of dichotomous questions, variability due to sampling, given a sample size of 400, produces a 95 percent confidence interval of plus
 or minus 5 percent in the worst case and 3 percent in the best case. For analyses within and between strata, given a sample of 100 in each of the stratum, for dichotomous questions, there will be a 95 out of a 100 chance of being plus or minus 10 percent of the real population figure in the worst case and 4% in the best case. Many of the important questions concerning use of services as well as illness, disease or symptoms are answered based on presence or absence, producing a dichotomous choice. The AILC report suggested that "confidence bounds on non-dichotomous data will not be radically different."

Household Eligibility

Considerable thought was given to eligibility for inclusion in the study and how to identify "American Indian" households. The
1990 AILC report recommended that "an American Indian household be defined as all persons who live together in one housing unit in which at least one resident identifies himself/herself as an American Indian." This definition allowed for non-American Indians in the survey but was simple for a field interviewer to follow and minimized "judgment calls" in the field. Furthermore, the report recommended that the adult female in the household

with primary childcare responsibility respond for all members of the household if possible. After three visits the interviewer could substitute another adult in the household if the preferred respondent could not be reached. Using these criteria the final results produced a sample of household members 79 percent American Indian and 20.9 percent non-Indian.

Sampling Frame

We requested tribal listings from all of the state and federal tribes as well as membership and/or client lists from Urban Indian Centers and Title V Indian Education programs, DSS outreach workers, CHRs and MIETS. All names and addresses were confidential and used only for the purpose of drawing a random sample of persons whom we contacted for face to face interviews. We received lists from all the the Urban Centers, 4 of the 7 Federally-recognized tribes, 3 of the 5 Historic tribes, many of the Title V Indian Education Programs, and the Grand Rapids catholic diocese, totalling over 20 different sources of lists of members, representing about 11,000 households and over 30,000 people. Lists were received from the following:

Bay Mills Indian Community
Detroit Indian Health Service
Escanaba Urban Indian Center
Genesee Indian Center
Grand Rapids Catholic Diocese
Grand Rapids Intertribal Council
Huron Potawatomi Indians
LacVieux Desert
Lansing Indian Center
Little Traverse Band of Ottowa and Chippewa
Little River Band
Michigan Department of Education - Title V
North American Indian Association
Pokagon Potawatomi Indian Nation
Saginaw Chippewas
Saginaw Inter-Tribal Association
Sault Ste. Marie Band of Chippewa Indians
Statewide Youth Retreat - Title V
SEMII (Southeastern Michigan Indian Association)
Urban Indian Affairs (DSS)

The final frame, selected with zip code maps, consisted of over 7,000 households. We selected a total of 867 households from the four strata. We believe we have the most inclusive and representative sample of Native Americans ever surveyed in Michigan, and perhaps in the country. This was a difficult and labor intensive task. Tables 1 shows the disposition of the selected households.

TABLE 1 : SAMPLE STATUS BY STRATA

	WAYNE	URBAN	RURAL	FEDERAL	TOTAL
COVERSHEETS MAILED	262	239	190	176	867
INCORRECT ADDRESS	119	83	52	27	281
UNABLE TO LOCATE	99	70	27	9	205
DECEASED	3	4	5	5	17
UNAVAILABLE	1	1	0	1	3
NO CONTACT	10	24	30	22	86
REFUSED	4	- 17	7	13	41
NON-INDIAN	1	15	2	0	18
NOT RETURNED	46	0	0	41	87

Of the 867 coversheets mailed, 281 were returned as incorrect addresses and another 205 were recorded as "unable to locate" because they were vacant, or moved with no forwarding address. See Table 2 for description of Sample and Non-Sample

Of the 867, 56 percent were either an incorrect address (n=281) or "not able to locate" for reasons such as vacancy, moved with no forwarding address, or not a household (n=205); approximately 2 percent were known to be deceased or were non-Indian households, 10 percent were not returned

(status unknown); 4.7 percent refused, and 10.3 percent were returned with no contact made or respondent was unavailable (See Table 1). Of the 867 respondents selected, 62 percent were designated as Sample and 38 percent Non-Sample (See Table 2). While our original estimate of sample size needed per stratum to obtain 120 completed interviews, was based on expected response, eligibility, and occupancy rates (See Appendix C), we underestimated slightly the number needed to obtain our goal. The majority of those referred to as non-sample were in Wayne and other urban areas, verifying the assumption of mobility and invisibility of the urban Indian population.

TABLE 2 : SAMPLE AND NON SAMPLE BY STRATA

	WAYNE	URBAN	RURAL	FEDERAL	TOTAL	%
SAMPLE RETURNED	113	150	156	121	540	62.0
NON-SAMPLE: NOT HOUSEHOLD (VACANT OR NO CURRENT ADDRESS)	99	70	27	9	205	24.0
NON-SAMPLE: DECEASED	3	4	5	5	17	2.0
NON-SAMPLE: NON INDIAN	1	15	2	0	18	2.0
NON-SAMPLE: NOT RETURNED (STATUS UNKNOWN)	46	0	0	41	87	10.0
TOTAL	262	239	190	176	867	100.0

Table 3 shows the overall response rate was 71 percent. Despite the difficulty in locating the Wayne county Native Americans, for those who were found, the response rate was higher (83%) than the other three strata; the Rural stratum response rate was 75 percent, and Urban and Federal 64 percent and 63 percent respectively. The overall refusal

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rate was 7.6 percent (n=41), suggesting that refusals were not the main contributor to the response rates. Refusals were highest in the Urban and Federal strata. In fact the Federal stratum was the most difficult in which to obtain completed interviews, with 76 households responding (representing 19.8 percent of the total households).

TABLE 3 : INTERVIEW STATUS AND RESPONSE RATES BY STRATA

	WAYNE	URBAN	RURAL	FEDERAL	TOTAL
COMPLETED INTERVIEWS	94	96	118	75	383
NON-INTERVIEWS: REFUSALS	4	17	7	13	41
NON-INTERVIEWS: UNABLE TO CONTACT	10	24	30	22	86
NON-INTERVIEWS: UNAVAILABLE	1	1	0	1	3
NON-INTERVIEWS: MISSING INFO.	4	12	1	10	27
TOTAL SAMPLE	113	150	156	121	540
RESPONSE RATE	83.0%	64.0%	76.0%	62.0%	71.0%

Using total population figures and total persons for whom data were received (n=1240), Wayne County contributed 21.6 percent to the total, other Urban areas 26.5 percent, on or near Federal reservations, 20.4 percent, and Rural 31.5 percent. Actual population figures from the 1990 census indicate approximately 15 percent reside in Wayne County, 28.9 percent in other urban areas, 18 to 20 percent live on or near reservations, and 36 percent in rural off-reservation communities. The largest undercount is estimated to be in the Wayne County area according to the Michigan Commission on Indian Affairs. Thus, the proportions represented in the four strata were deemed

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representative of the statewide population distribution and no weighting was used for the analyses by strata.

Field Work

Wayne State University, Institute of Gerontology contracted with Bonnie Brady (former Indian Aging expert at the Michigan Office of Services to the Aging) to design and manage the fieldwork for the project, including the procurement of the sample and recruitment and training of interviewers. Specific accomplishments included:

- The survey instrument was refined and pretested. Instruction protocols and verbatim questions were written. Show Cards were instituted for difficult and/or sensitive response categories.

- 43 interviewers were enlisted and trained, including 30 CHRs or CHTs and 13 others identified by Urban Indian program directors. All interviewers were American Indians.

- A Training Manual was developed, printed and distributed to interviewers.

Materials included:

> List of project staff with phone numbers
> Advisory Council list
> Administrative Information
> Copy of Respondent Letter
> Interviewing Techniques
> Practice copy of survey and supplement
> Show Cards
> Sample Coversheet (blue) and guidelines

•   Training took place between March 21 and April 16, 1991 at 7 locations around the state. Elizabeth Chapleski and Bonnie Brady conducted the training. Thanks to the following for arranging and hosting the training:

* Grand Rapids Intertribal Council
* Genesee Indian Center in Flint
* Grand Traverse Senior Meal Site in Traverse City
* Sault Ste. Marie Tribal Health Center at Kincheloe
* Anishinabeg Mom Weh Center in Escanaba
* Detroit Indian Health Service in Detroit
* Urban Indian Affairs of MDSS in Detroit

PART II
DATA FINDINGS

Throughout this report we will be referring to differences by strata and comparisons or contrasts with the state total. All the tables are arranged in the same relative order and for detailed comparisons we encourage the reader to review all the tables carefully so that needs by area of residence may be better understood.

CHAPTER IV
CHARACTERISTICS OF THE POPULATION

Demographic Comparisons with 1990 Census.

Demographic comparisons with other sources of information about the target population can reveal problems related to the generalizability of the results and if insufficiently different, lend confidence to the representativeness of a sample.

In Table 4 we show comparisons between the U.S. all races, Michigan all races, Michigan American Indians and this health profile, along selected demographics.

For the most part our estimates come very close to the 1990 Census figures for all Michigan's Indians with a few exceptions--marital status and median age. This sample is slightly older and more likely to be married than 1990 Census figures reports. Appendix B includes 1990 Census population statistics on age distribution; persons aged 60 and above constitute only 7.72 percent of Michigan's American Indian population compared to 16.24 percent of Michigan's 60 and over population in general. Those 60 and over constitute 12.6 percent of this sample and therefore raise the median age of the study. The cohorts aged 40 and 50 are also slightly over-represented and probably explain the differences in marital status. Comparisons of sex and education are within one percent of Census figures.

TABLE 4: DEMOGRAPHIC COMPARISONS BETWEEN THE 1990 CENSUS FIGURES ON U.S (ALL)RACES, MICHIGAN (ALL) RACES, MICHIGAN AMERICAN INDIAN HEALTH PROFILE 1992

		U.S ALL RACES*	MICHIGAN ALL RACES*	MICHIGAN AMERICAN INDIANS*	HEALTH PROFILE
EDUCATION	COLLEGE GRADUATE	20.3	18.1	7.6	6.2
	HIGH SCHOOL GRADUATE	75.2	79.6	67.8	67.2
	LESS THAN HIGH SCHOOL	24.8	20.4	32.2	32.8
MARITAL STATUS	MARRIED	55.8	54.0	44.5	53.9
	NEVER MARRIED	26.5	27.7	33.9	28.6
	WIDOWED	7.1	7.2	5.0	5.0
	DIVORCED/SEPERATED	10.5	11.0	16.6	12.5
LIVE ALONE		24.6	23.7	20.2	16.0
SEX	MALE	48.7	48.5	48.6	47.4
	FEMALE	51.3	51.5	51.4	52.6
MEDIAN AGE		32.9	32.6	25.6	31.4

* Data Sources : Current population reports series P-20, No. 461, Bureau of Census, 1990. 1990 Census of population and housing 1990 CPH-1-1, Bureau of Census.

The issue of non-sample and nonresponse cannot be ignored, in that there may be differences between the study population and the target population that will bias the results. The practice of weighting results on variables of greatest interest assumes no differences in responders and nonresponders (Henry, G.T., 1990), an assumption not appropriate for this population.

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It is likely that both the census and this survey underrepresented the poorest segments of the Indian community. Those missed in this survey were likely missed by the census also; they are the most mobile and least likely to live in one area or maintain a regular address. These factors are most associated with lack of attachment to the economic structure and will be reflected in inflated statistics on home ownership, income and employment, as well as health and mental health which are directly or indirectly affected by these socioeconomic markers.

Selected Demographics by Strata

Demographic characteristics do vary by area of residence. The lists generated by Urban Indian centers outside of Detroit included many suburban addresses, reflecting a socioeconomic advantage in residential environment. These advantages of the stratum designated as "Urban" are reflected throughout the report in terms of education, income, and health. This stratum was most likely to include persons known and attached to Urban Indian Centers and living in "suburban" areas rather than those who reside in inner cities where the greatest need might be found.

Those who reside on federal reservations and those in off-reservation rural areas are slightly younger on average than urban residents, with a median age 30.4 and 28.6 respectively compared to 35 for urban and 37.1 for Wayne County Indians. Wayne's strata is slightly more male and reports a slightly higher percentage of non-Native Americans in the sample.

While most Michigan Indians are Roman Catholic (51.3 percent) due to having been settled by French Catholic fur traders, reservation residents are more likely to be Roman

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TABLE 5: CHARACTERISTICS OF MICHIGAN'S AMERICAN INDIANS 1992 BY STRATA (PERCENTAGES)

DEMOGRAPHICS		FEDERAL N = 253	URBAN N = 328	RURAL N = 391	WAYNE N = 268	TOTAL* N = 1240
AGE	0 - 4	8.5%	5.7%	6.4%	5.0%	6.3%
	5 - 14	22.3	17.0	21.8	14.2	19.0
	15 - 19	8.5	9.7	12.6	8.4	10.1
	20 - 29	9.7	12.6	11.8	14.6	12.2
	30 - 39	16.2	12.6	16.9	12.3	14.6
	40 - 49	16.2	17.9	14.4	16.9	16.2
	50 - 59	5.7	10.1	5.9	15.3	9.0
	60+	13.0	14.5	10.3	13.4	12.6
	MEDIAN	30.4	35.0	28.6	37.1	31.4
SEX	MALE	49.0	45.1	44.6	52.6	47.4
	FEMALE	51.0	54.9	55.4	47.4	52.6
RACE	NATIVE AMERICAN	82.0	78.5	78.7	77.6	79.1
	NON-NATIVE AMERICAN	18.0	21.5	21.3	22.4	20.9
RELIGION	NATIVE AMERICAN	8.6	9.9	13.8	12.3	11.4
	PROTESTANT	18.1	31.4	33.3	26.4	28.3
	CATHOLIC	63.3	52.1	41.9	53.3	51.3
	OTHER	10.0	6.6	11.0	8.0	9.0
EDUCATION"	SOME HIGH SCHOOL OR LESS	32.9	29.1	33.3	36.4	32.8
	HIGH SCHOOL GRAD.	62.7	59.5	63.4	58.6	61.0
	COLLEGE GRAD. OR MORE	4.4	11.5	3.3	5.1	6.2
MARITAL STATUS*	MARRIED	60.8	54.2	50.2	52.8	53.9
	WIDOWED	3.8	5.7	5.6	4.5	5.0
	SINGLE	22.8	31.7	29.3	28.6	28.6
	SEPARATED, DIVORCED	13.3	8.4	14.8	14.0	12.5
EMPLOYMENT"	EMPLOYED	52.8	60.4	50.4	58.6	55.6
	UNEMPLOYED	16.4	12.4	19.4	17.2	16.3
	HOMEMAKER, STUDENT, RETIRED	30.8	27.1	30.3	24.2	28.1
HAVE NO PHONE		12.1	6.8	11.4	14.7	12.8

* Based on age 18 yrs. and older.
** Based on age 16 yrs. and older.
    N's vary between 1148 and 1240.

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Catholic (63.3 percent) than are rural off-reservation (41.9 percent) or urban Indians (52-53 percent). About 11 percent of the state's Indians report preferring the Native American religion but this choice was reported less often by those living on reservations(8.6 percent) than by those living in rural areas (13.8 percent).

Among those 18 and over, 67.2 percent earned high school degrees, though more urban stratum respondents have high school degrees or more education (71 percent).

Marital status varies by strata also, with those on federal reservations most likely to be married (60.8 percent). Urban respondents were least likely to be separated or divorced (8.4 percent) compared to 12.5 percent statewide, while rural (14.8 percent) and Wayne(14 percent) residents are most likely to be separated or divorced.

Employment status is not to be confused with unemployment rates, but rather a measure of how one defines ones relationship to the workforce. Considering the entire sample aged 16 and older, 55.6 percent report being employed, 16.3 percent unemployed and 28.1 percent not in the work force (homemaker, student or retired). By strata, the rural stratum reports the largest percentage unemployed (19.4 percent) and the urban reports the fewest with 12.4 percent.

A telephone is a critical communication tool for access to health, social and emergency services. Michigan Bell estimates nearly 95 percent of Michigan households have a phone, yet only 87 percent of Michigan's Indian households report having a phone and in Wayne County only 85 percent have a phone.

Household Size

Native American social networks or family configurations, are much more firmly based on interdependence than Anglo-American families (John, 1988). The extended family and its traditional support system is viewed as the norm, yet the sparse research on American Indian families raises questions about the affects of acculturation and migration on the erosion of these networks.

Analyzing household information in this study in Table 6 it shows the average household size is 3.24 persons per household. Compared with white households in Michigan, Indian households are larger. U. S. Census reports from 1990 show Michigan White average household size was 2.6 and American Indian, Eskimo or Aleut 2.93. Not only are households larger, many are multi-generational, extended family or include non-related persons. Among the 383 households interviewed, 13 percent were extended family households, that is households with family other than spouse or own children, and 8.6 percent were living with persons of no spousal or blood relation.

TABLE 6: HOUSEHOLD SIZE AND CONFIGURATION

	WAYNE	URBAN	RURAL	FEDERAL	TOTAL	%
Extended Family households	15	14	13	6	48	13
Non-related Family Households	1	2	4	0	7	2
Households Interviewed		94	96	118	72	383
Individual # Cases					1242	
Average Household Size						3.24

The size of household varies by strata as shown in Table 7.
While 16.2 percent of the sample households were single-
person households, in Wayne county 21.3 percent lived alone.

TABLE 7: HOUSEHOLD SIZE BY STRATA

HOUSEHOLD SIZE	FEDERAL N = 76	URBAN N = 96	RURAL N = 117	WAYNE N = 94	TOTAL N = 383
1	14.5%	13.5%	15.4%	21.3%	16.2%
2	23.7%	24.0%	25.6%	29.8%	5.8%
3 - 4	35.5%	41.7%	31.6%	28.7%	34.2%
5 - 6	23.7%	13.5%	23.1%	18.1%	19.6%
≥ 7	2.6%	7.3%	4.3%	2.1%	4.2%

The likelihood of household incomes being at or below the
federal poverty level is related to household size. In
Table 8 it shows those who live alone and those who live in
households of seven or more are much more likely to fall at
or below 125% of poverty than those who live in households
between two and six in size.

TABLE 8: HOUSEHOLD SIZE RELATED TO POVERTY STATUS

HOUSEHOLD SIZE	N	≥ 125% POVERTY	ABOVE POVERTY
1	55	60.0%	40.0%
2	184	26.1%	73.9%
3 - 4	420	39.3%	60.7%
5 - 6	386	29.5%	70.5%
7 OR MORE	127	77.2%	22.8%
TOTAL	1172	39.1%	60.9%

Chi-square is significant at 0.0000 level or less.

For those living alone in Detroit, the likelihood of living
at or near poverty is great. Thus the effect of migration

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to the city appears to be negative in terms of greater isolation and lower income, despite the fact that most of the migrations were for the purpose of gaining greater financial security.

DEATHS IN HOUSEHOLD

There is evidence of inaccuracy in birth and death records among American Indian populations. Reasons for this vary, including the place of death and the profession of the person who files the death report. Therefore, we asked questions about household deaths.

The data on deaths show so few that reporting percentages is inappropriate. Slightly over 2% (N = 8) of the households reported that a household member had died during the past year and no households experienced more than one death. Five of the eight deaths were attributed to natural causes, on to suicide, and one to alcoholism. One respondent refused to report the cause of death.

Four deaths were reported by doctors and three by coroners on the death certificate. The age of the deceased ranged from 18 to 90 years, with 63% having been over 50 years at the time of his or her death.

Tribal Representation

Of the 1240 persons about whom data were collected, 84.7 report reported some tribal affiliation. Michigan tribes represent 83.4% of all tribes mentioned and 17 percent come from other states or Canada. Twelve specific Michigan tribes are represented in the sample (Table 9), and 7 non-Michigan tribes received multiple mentions, while 61 other non-Michigan tribes were mentioned individually.

TABLE 9: TRIBAL MEMBERSHIP OF INDIVIDUALS IN STUDY AND PERCENT OF TOTAL

TRIBE	NUMBER	PERCENTAGE OF TOTAL
BAYMILLS	41	4.0%
SAULT St. MARIE	438	41.7%
LAC VIEUX DESERT	4	0.4%
KEWEENAW BAY	39	3.7%
HANNAHVILLE	5	0.5%
GRAND TRAVERSE	84	8.0%
SAGINAW CHIPPEWA	78	7.4%
LITTLE TRAVERSE BAND	59	5.6%
BURT LAKE	14	1.3%
HURON LAKE	42	4.0%
POKAGON BAND	66	5.3%
GRAND RIVER OTTAWA	16	1.5%
ALEUT	5	4.8%
APACHE	2	0.2%
CHEROKEE	32	3.0%
CANADIAN CHIPPEWA	25	2.4%
OTHER CANADIAN TRIBES	18	1.7%
LUMBEE	2	0.2%
MUNCIE DELAWARE	6	0.6%
OTHERS	61	5.8%
DON'T KNOW	13	1.2%
TOTAL	1050	100%

Most of Michigan's tribal members live off reservations, with 72.4 percent reporting they live more than 30 miles from a reservation. Most of those living on reservations (87.3 percent), 95 percent of those living near (within 30

miles) a reservation and 57 percent of those who live far from a reservation (more than 30 miles) are members of a Michigan federally recognized tribe. (See Table 10)

TABLE 10: TRIBAL AFFILIATION OF INDIVIDUALS BY PROXIMITY TO RESERVATION

TRIBAL AFFILIATION	PROXIMITY			
	ON RESERVATION	NEAR RESERVATION	FAR FROM RESERVATION	TOTAL
MICHIGAN FEDERALLY RECOGNIZED TRIBES	89	153	394	636 (66.7%)
STATE HISTORIC TRIBES	3	5	145	153 (16.1%)
OTHER TRIBES	10	3	151	164 (17.2%)
TOTAL	102 (10.7%)	161 (16.9%)	690 (72.4%)	953 (100%)

Tribal Affiliation by Strata is shown in Table 11. State Historic tribal members make up 21 percent of the sample and most of them (59.5 percent) live in rural off-reservation areas; another 16.3 percent of their members live in Wayne County and 21.6 percent live in other urban areas. Michigan's federally recognized tribe members are the most spread out geographically, with 30.2 percent living on reservation land, 27 percent in rural, 15.3 percent in Wayne County and 29.5 percent in other urban areas. Those who are not indigenous to Michigan are most likely to be urban, with 47.9 percent living in Wayne County, and 29.7 percent in other urban areas; 18.2 percent live in rural areas and 4.2 percent on federal reservations.

TABLE 11: TRIBAL AFFILIATION BY STRATA

TRIBAL AFFILIATION	STRATA				
	WAYNE N = 201	OTHER URBAN N = 257	RURAL N = 293	FEDERAL RESERVATION N = 203	TOTAL N = 954
FEDERAL	48.3%	68.1%	58.7%	94.6%	-
N = 636	15.3	29.5	27.0	30.2	100%
STATE HISTORIC N = 153	12.4%	12.8%	21.1%	2.0%	-
	16.3	21.6	59.5	2.6	100%
OTHER TRIBES N = 165	39.3%	19.1%	10.2%	3.4%	-
	47.9	29.7	18.2	4.2	100%
TOTAL N = 954	100% -	100% -	100% -	100% -	

Chi-square = 194 ; Significance = 0.0000

Approximately one fifth (21.5%) of the sample respondents are non-Indians living in Indian households and not eligible for tribal enrollment. In Table 12 it shows the percentages reporting enrollment by strata--61.9 percent are enrolled and 16.7 percent are eligible but not enrolled. Those living on federal reservations are most likely and those in urban areas outside Wayne County least likely to report enrollment. Of those who report being enrolled, 65.5 percent have enrollment cards (See Table 13). Those living in rural areas are least likely to report having cards, with 44.8 percent not having a card.

TABLE 12: PERCENTAGE REPORTING TRIBAL ENROLLMENT

	FEDERAL N = 247	URBAN N = 323	RURAL N = 387	WAYNE N = 262	TOTAL N = 1219
ENROLLED	71.3	50.8	65.1	61.8	61.9
ELIGIBLE BUT NOT ENROLLED	6.9	28.8	11.6	18.3	16.7
NOT ELIGIBLE	21.9	20.4	23.3	19.8	21.5

TABLE 13: PERCENTAGE WHO HAVE ENROLLMENT CARDS

	FEDERAL N = 173	URBAN N = 177	RURAL N = 250	WAYNE N = 163	TOTAL N = 763
HAVE CARD	72.3	75.1	55.2	63.8	65.5
DO NOT HAVE CARD	27.7	24.9	44.8	36.2	34.5

Of those who report American Indian ancestry, 34.2 percent are less than one quarter Indian blood quantum and 65.8 percent are one quarter or more American Indian blood. (See Table 14) Those Indians most likely to be full-blooded are members of State Historic tribes (21.7 percent) or from tribes not indigenous to Michigan (29.6 percent). Only 7.2 percent of Michigan federally-recognized tribal members are full-blooded and 35 percent are less than one quarter. It is apparent that each tribe has its own distinct criteria for membership.

Two interesting cells in Table 14 represent facts about urban Indians. Wayne County reports the largest proportion of full bloods, and other urban areas have the largest proportion of those with less than 1/4 blood quantum. This

may represent a trend toward inter-marriage among the urban Indians outside of Detroit, or the gradual result of inter-marriage may move households further away from reservations or tribal lands. While at a considerable disadvantage compared to the general population, the "urban" stratum appears to be the most advantaged compared to the other strata in Wayne County, rural and reservation areas in terms of employment and income as well as health.

TABLE 14: BLOOD QUANTUM BY STRATA

BLOOD QUANTUM	FEDERAL N = 211	URBAN N = 314	RURAL N = 384	WAYNE N = 266	TOTAL N = 1175
0	21.3	20.4	21.9	21.1	21.2
0.25 OR LESS	18.5	32.8	20.8	10.5	21.3
0.25 TO 0.5	27.5	25.8	21.1	23.7	24.1
0.5 TO LT 1	21.8	15.9	25.3	25.2	22.1
FULL BLOOD	10.9	5.1	10.9	19.5	11.3

CHAPTER VI
HOUSING AND NEIGHBORHOOD PROBLEMS

Home Ownership

Nearly three fourths of the sampled families are living in homes they own or are buying, while 22.5 percent are renting; 2.5 percent report some other arrangement. (See Table 15) This is most likely an overrepresentation of home ownership since most of the 38 percent unable to be located (non-respondents) are not likely to own homes. The Urban strata again emerges as significantly different from the others. In fact, the percentage of home owners among this stratum was 83.2 percent.

TABLE 15: OWN/RENT DWELLING

	FEDERAL N = 76	URBAN N = 96	RURAL N = 116	WAYNE N = 92	TOTAL N = 380
OWN HOUSE	71.1	81.3	66.4	62.2	70.8
RENT HOUSE	28.9	15.6	30.2	32.6	26.8
OTHER	0.0	3.1	3.4	2.2	2.4

Most of the Indian families live in single family dwellings (78.9%) but a rather sizeable proportion (8.2%) are living in trailer homes and this choice is disproportionately evident in the federal strata (17.8%) and in rural areas (12.8%). (See Table 16)

TABLE 16: TYPE OF DWELLING

	FEDERAL N = 253	URBAN N = 310	RURAL N = 391	WAYNE N = 265	TOTAL N = 1219
SINGLE FAMILY	74.7	86.8	73.9	81.1	78.9
MULTI FAMILY	3.2	7.1	3.1	10.9	5.8
APARTMENT	4.0	1.6	7.9	6.8	5.3
TRAILER	17.8	1.6	12.8	0.0	8.2
OTHER	0.4	2.9	2.3	1.1	1.8

Problems with Housing/Neighborhood Environment

Many of the problems related to housing and neighborhoods reflect environmental conditions known to affect health and resistance to disease. The vast majority have no problems with these conditions. However, the proportion of households that do report problems represent a significant number of Michigan Indian households (See table 17). The most commonly recognized problem is drafty doors and windows, with nearly half of the respondents reporting this is a small (29.3%) or big (20.2%) problem. Poor insulation is problematic for over 32 percent, insect or rodent control for 21 percent, trash removal for over 11 percent, heating their homes for 10 percent, and 8 percent have problems with toilet facilities. Thus these conditions with the most conservative estimate, are affecting between 5,000 and 18,000 persons statewide. However, reviewing the strata differences shows that conditions are most severe for rural and least severe for urban strata. Those problems directly related to housing structures (poor insulation, toilet facilities, drafty doors and windows) are also disproportionately severe for those living on federal reservations. Sanitary water appears to be exclusively a rural and reservation problem as would be expected.

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TABLE 17: HOUSING AND NEIGHBORHOOD PROBLEMS

TRASH REMOVAL		FEDERAL N = 253	URBAN N = 328	RURAL N = 391	WAYNE N = 268	TOTAL N = 1240
	NO PROBLEM	90.9	94.8	83.1	86.9	88.6
	SMALL PROBLEM	3.6	1.8	7.9	3.7	4.5
	BIG PROBLEM	5.5	3.4	9.0	9.3	6.9

INSECT, RODENT CONTROL		FEDERAL N = 253	URBAN N = 328	RURAL N = 391	WAYNE N = 268	TOTAL N = 1240
	NO PROBLEM	77.5	86.6	75.2	77.2	79.1
	SMALL PROBLEM	13.4	10.7	21.0	16.0	15.6
	BIG PROBLEM	9.1	2.7	3.8	6.7	5.2

DRAFTY DOORS, WINDOWS		FEDERAL N = 253	URBAN N = 328	RURAL N = 391	WAYNE N = 268	TOTAL N = 1240
	NO PROBLEM	41.9	56.1	43.2	62.3	50.5
	SMALL PROBLEM	36.8	29.6	28.1	23.5	29.3
	BIG PROBLEM	21.3	14.3	28.6	14.2	20.2

POOR INSULATION		FEDERAL N = 253	URBAN N = 320	RURAL N = 391	WAYNE N = 268	TOTAL N = 1232
	NO PROBLEM	66.4	75.3	53.7	79.9	67.6
	SMALL PROBLEM	18.2	10.9	21.7	10.1	15.7
	BIG PROBLEM	15.4	13.8	24.6	10.1	16.7

TOILET FACILITIES		FEDERAL N = 253	URBAN N = 328	RURAL N = 391	WAYNE N = 268	TOTAL N = 1240
	NO PROBLEM	87.7	96.3	85.7	96.6	91.3
	SMALL PROBLEM	7.1	0.9	9.2	1.1	4.8
	BIG PROBLEM	5.1	2.7	5.1	2.2	3.9

KITCHEN FACILITIES		FEDERAL N = 253	URBAN N = 328	RURAL N = 391	WAYNE N = 268	TOTAL N = 1240
	NO PROBLEM	94.1	95.1	94.9	93.7	94.5
	SMALL PROBLEM	5.5	2.7	3.6	4.5	4.0
	BIG PROBLEM	0.4	2.1	1.5	1.9	1.5

SANITARY WATER		FEDERAL N = 253	URBAN N = 328	RURAL N = 391	WAYNE N = 263	TOTAL N = 1235
	NO PROBLEM	94.1	100.0	91.0	97.7	95.5
	SMALL PROBLEM	0.8	0.0	4.3	1.5	1.9
	BIG PROBLEM	5.1	0.0	4.6	0.8	2.7

HOT WATER		FEDERAL N = 253	URBAN N = 328	RURAL N = 391	WAYNE N = 268	TOTAL N = 1240
	NO PROBLEM	94.5	98.8	94.6	97.0	96.2
	SMALL PROBLEM	10.5	0.0	2.8	2.2	1.5
	BIG PROBLEM	4.7	1.2	2.6	0.7	2.3

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HEATING		FEDERAL N = 253	URBAN N = 328	RURAL N = 391	WAYNE N = 268	TOTAL N = 1240
	NO PROBLEM	82.6	92.7	88.0	95.1	89.7
	SMALL PROBLEM	13.4	5.2	7.2	2.2	6.9
	BIG PROBLEM	4.0	2.1	4.9	2.6	3.5

MORTGAGE, RENT PAYMENTS		FEDERAL N = 253	URBAN N = 328	RURAL N = 391	WAYNE N = 268	TOTAL N = 1240
	NO PROBLEM	77.1	88.4	74.2	84.0	80.6
	SMALL PROBLEM	11.5	5.8	13.6	12.3	10.8
	BIG PROBLEM	11.5	5.8	12.3	3.7	8.5

OTHER HOUSING PROBLEMS		FEDERAL N = 253	URBAN N = 327	RURAL N = 391	WAYNE N = 265	TOTAL N = 1236
	YES	17.4	10.4	24.8	3.0	14.8
	NO	82.6	89.6	75.2	97.0	85.2

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Income and Poverty Status

The average household income in 1991 was less than $18,000
and 53.5 percent of the households report incomes less than
$20,000, while only 7.6% report incomes of $50,000 or more.
(See Table 18)   No reservation households and only 1.8
percent of rural households earned $50,000 or more, in
contrast to the urban (outside Detroit) residents, 17.2
percent of whom earned in this category.

TABLE 18: MEAN HOUSEHOLD INCOME

INCOME	FEDERAL N = 68	URBAN N = 93	RURAL N = 111	WAYNE N = 85	TOTAL N = 357
LT $5000	8.8%	7.5%	13.5%	17.6%	12.0%
$5000 - 9999	16.2	11.8	23.4	16.5	17.4
$10,000 - 14,999	17.6	9.7	18.0	10.6	14.0
$15,000 - 19,999	19.1	10.8	8.1	4.3	10.1
$20,000 - 24,999	8.8	7.5	12.6	3.5	8.4
$25,000 - 34,999	16.2	12.9	14.4	16.5	14.8
$35,000 - 49,999	13.2	22.6	8.1	20.0	15.7
OVER $50,000	0.0	17.2	1.8	10.6	7.6
MEAN	$15,836	$21,532	$15,108	$18,500	$17,452

Adjusting these income figures for household size, 32.8

percent of all Indian households statewide qualified under federal poverty standards and an additional 4.5 percent were between 100 and 125 percent of poverty. (Table 19) The American Indian population is the most disadvantaged minority in both the U.S. and Michigan in terms of poverty figures and these data confirm those findings. By strata, the trends continue to demonstrate the advantage of the Urban stratum and the vulnerability of the Rural stratum where poverty proportions are 19.4 percent and 44.1 percent respectively. The Wayne County and Federal strata fall midway between these figures with 31.8 percent and 33.8 percent respectively.

TABLE 19: PERCENT OF ALL HOUSEHOLDS AT POVERTY LEVELS *

POVERTY LEVEL	FEDERAL N = 68	URBAN N = 93	RURAL N = 111	WAYNE N = 85	TOTAL N = 357
≤ 100% POVERTY	33.8%	19.4%	44.1%	31.8%	32.8%
BETWEEN 100 AND 125% POVERTY	5.9%	4.3%	5.4%	7.1%	5.6%
> 125% POVERTY	60.3%	76.3%	50.5%	61.2%	61.6%

Chi-square is significant at 0.01 level or less.

* Adjusted for household size according to 1991 Bureau of Census figures: $6,620 for a family of one, $8,880 for a family of two, etc.
Source : "Money, Income and Poverty Status in United States: 1991", U.S. Bureau of Census, Washington, Government Printing Office, 1992.

- Poverty is a predictor of many other factors that may affect health and the ability to access services to ameliorate problems. Three characteristics that tend to act as buffers to poverty are education, employment and marital status.

FIGURE 1: PERCENT AT OR BELOW 125% OF POVERTY WITH LESS THAN HIGH SCHOOL EDUCATION, HIGH SCHOOL DIPLOMA, AND COLLEGE DEGREE

EDUCATION LEVEL
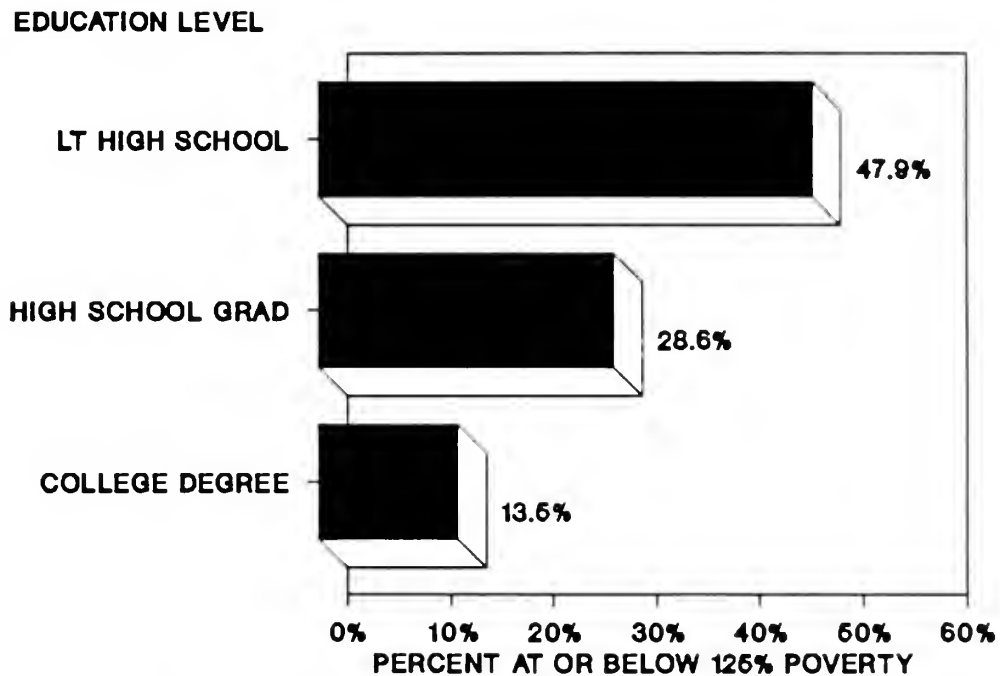
Chi-square is significant at 0.0000 level or less.

FIGURE 2: PERCENT AT OR BELOW 125% OF POVERTY EMPLOYED, UNEMPLOYED (INCLUDING LAID OFF) AND NOT IN LABOR FORCE (RETIRED, STUDENT, HOUSEMAKER etc.)
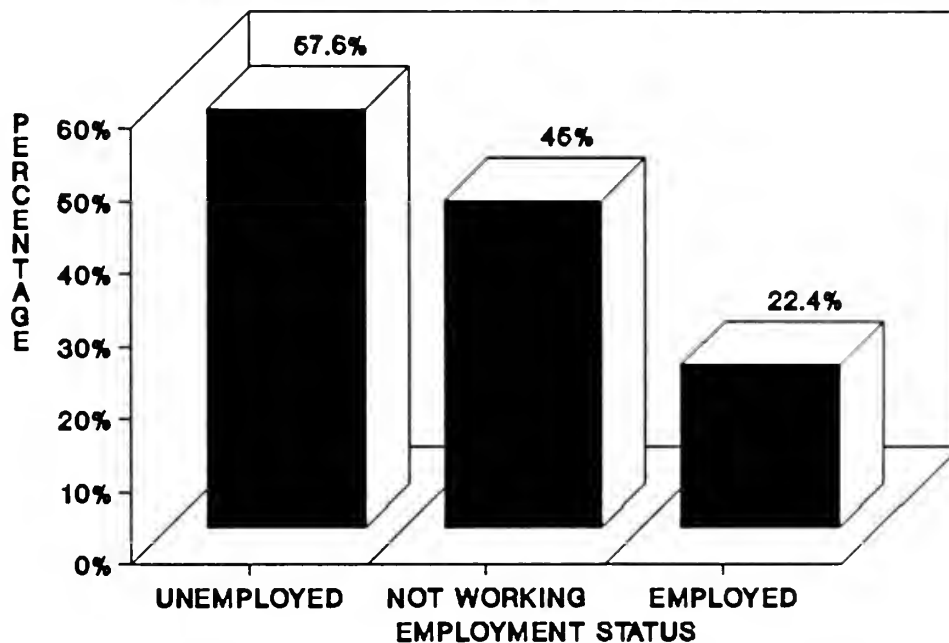
Chi-square is significant at 0.0000 level or less.

Educational attainment is a strong predictor of poverty. Figure 1 shows that among those with less than a high school degree 48 percent are at or below poverty, compared to 28.6 percent of those with a high school diploma and 13.5 percent of those with a college degree.

Similarly, current employment status serves as a prevention to poverty, with 57.6 percent of the unemployed reporting incomes at or below poverty status compared to 22.4 percent of the employed. The large number of "working poor" is, however, a problem and demonstrates that having a job may not provide the necessary resources to be able to maintain good nutrition, housing and adequate care. (See Figure 2)

Being married is a strong predictor of poverty in both the young and old. Widowed persons who are often older and

FIGURE 3: PERCENT AT OR BELOW 125% OF POVERTY WHO ARE MARRIED, SINGLE (DIVORCED, NEVER MARRIED, SEPARATED), OR WIDOWED

Chi-square is significant at 0.0000 level or less.

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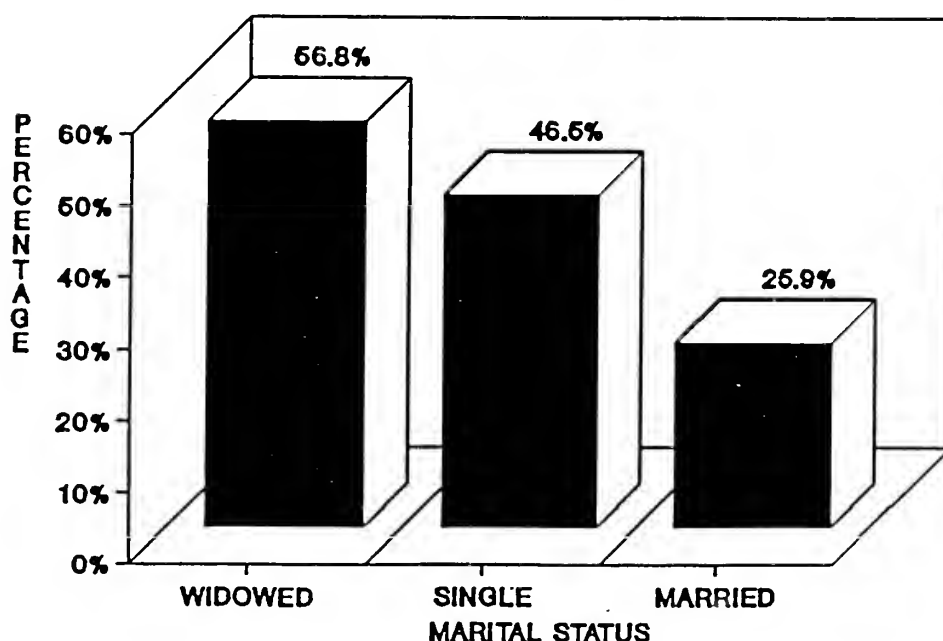
those who are single, e.g., divorced, separated, or never married are more likely, 56.8 percent and 46.5 percent respectively, to report being at or below 125 percent of poverty than the married (25.9%). (See Figure 3)

Employment Status and Labor Force Participation
Occupational Data

Employment

Employment data partially reflect the income statistics reported in the previous section, with only 55.6 percent of those 16 and over reporting their work status as "employed", 16.3 percent as "unemployed" and 28.1 percent as not in the work force due to homemaking, student or retirement status. (See Table 20) Employment status is not to be confused with unemployment rates, but rather a measure of how one defines ones relationship to the workforce. By strata, the rural stratum reports the largest percentage unemployed (19.4%) and the urban reports the fewest with 12.4 percent.

TABLE 20: PERCENT OF TOTAL AGE 16 AND OVER BY EMPLOYMENT STATUS

	FEDERAL N = 159	URBAN N = 225	RURAL N = 244	WAYNE N = 198	TOTAL N = 826
EMPLOYED	52.8%	60.4%	50.4%	58.6%	55.6%
UNEMPLOYED	16.4%	12.4%	19.4%	17.2%	16.3%
HOMEMAKER, STUDENT, RETIRED	30.8%	27.1%	30.3%	24.2%	28.1%

For those age 16 and over who report being in the workforce, 17.3 percent were currently unemployed and another 5.4 percent were laid off, figures much in excess of all-race unemployment figures in Michigan. (See Table 21) The rural stratum unemployment percentage is 22.4, the federal 18.2

percent and Wayne County 17.3 percent compared to 11.6 in the urban areas.

TABLE 21: PERCENT OF LABOR FORCE (AGE 16 AND OVER) WHO ARE EMPLOYED, LAID OFF, UNEMPLOYED

	FEDERAL N = 110	URBAN N = 164	RURAL N = 170	WAYNE N = 150	TOTAL N = 594
EMPLOYED	76.4%	82.9%	72.4%	77.3%	77.3%
LAID OFF	5.5%	5.5%	5.3%	5.3%	5.4%
UNEMPLOYED	18.2%	11.6%	22.4%	17.3%	17.3%

Occupation

The majority of those employed are working in either sales, service or unskilled labor (77.9%), while only 13.3 percent are in executive or professional occupations, 7.4 percent in technical or skilled trades, and 0.4 percent in the military. (Table 22) Most work for private companies (62.8%), with the government employing 17.5 percent, 12 percent self employed, and 5.5 percent working for the reservation. Of those living on reservations, 25 percent are employed by the tribe. (Tables 23 and 24)

TABLE 22: OCCUPATION

OCCUPATION	FEDERAL N = 87	URBAN N = 146	RURAL N = 117	WAYNE N = 123	TOTAL N = 473
EXECUTIVE, PROFESSIONAL	19.5%	12.3%	15.4%	8.1%	13.3%
TECHNICAL, SKILLED	5.7%	9.6%	6.8%	6.5%	7.4%
SALES, SERVICE	46.0%	50.0%	46.2%	47.2%	47.6%
LABOR	28.7%	28.1%	31.6%	36.6%	31.3%
MILITARY	0.0%	0.0%	0.0%	1.6%	0.4%

TABLE 23: EMPLOYER

	FEDERAL N = 94	URBAN N = 148	RURAL N = 127	WAYNE N = 123	TOTAL N = 492
PRIVATE COMPANY	30.9%	64.9%	66.9%	80.5%	62.8%
GOVERNMENT	30.9%	16.9%	15.0%	10.6%	17.5%
SELF	12.8%	14.9%	11.8%	8.1%	12.0%
RESERVATION	24.5%	0.0%	3.1%	0.0%	5.5%
OTHER	1.1%	3.4%	3.1%	0.8%	2.2%

TABLE 24: EMPLOYER BY OCCUPATION

	OCCUPATION				
EMPLOYER	EXECUTIVE, PROFESSIONAL N = 62	TECHNICAL, SKILLED N = 34	SALES, SERVICE N = 217	LABOR N = 139	MILITARY N = 2
PRIVATE COMPANY	30.6	79.4	62.7	77.0	0.0
GOVERNMENT	37.1	11.8	18.0	8.6	100.0
SELF	11.3	5.9	12.0	11.5	0.0
RESERVATION	12.9	2.9	5.5	1.4	0.0
OTHER	8.1	0.0	1.8	1.4	0.0

Among those working, most are working fulltime. Table 25 shows the mean number of hours worked per week was 37 hours and this does not vary significantly by strata.

TABLE 25: MEAN HOURS WORKED PER WEEK

MEAN HOURS WORKED	FEDERAL N = 84	URBAN N = 141	RURAL N = 127	WAYNE N = 122	TOTAL N = 474
	38	36	36	37	37

CHAPTER VII
HEALTH CONDITIONS - REPORTED DISEASES AND SYMPTOMS

Ideally, both policy and planning are informed by knowledge. The health data reported in this section and throughout the report assess the health needs of the population. Need can aid in identifying service requirements and resources required to develop those services.

Throughout this section we compare a portion of our data with the National Medical Expenditure Survey (NMES II) 1987 and The Survey of American Indians and Alaska Natives, a separate sample of NMES of American Indians and Alaska Natives living on or near Federal reservations and eligible to receive care provided or supported by the Indian Health Service. These national surveys offer a unique opportunity for comparison and lend credibility and confidence to the Michigan data.

Since we relied on a single informant per household, usually the mother/wife, and there was no clinical screening for undiagnosed problems, it is expected that the data reported is an underestimation of health problems of Michigan Indians.

Comparisons of Health with National Data

Self-rated health has proven to be a reliable global measure of actual health as well as a good predictor of health behaviors (Linn, et al, 1980). For instance those who rate themselves in poorer health are more likely to seek care. Though self-reports have been found to correspond to objective health indicators they, of course, should never be the sole source of health assessment but rather a crude screening and measurement device.

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The widespread use of the simple measure of self-rated health offers an opportunity for comparison across populations and studies. Figure 4 is a comparison of self rated health and shows that 3 to 4 percent more American Indians report their health as fair or poor than the U.S. population at large reports (SAIAN 19.8% compared to NMES 16.3%) and Michigan Indians are quite similar to the SAIAN population with 20.1% reporting their health as fair or poor.

Self Rated Health and Selected Demographics

Self rated health varies little across strata with the exception of the Urban (not Detroit) residents who are more likely to report their health as excellent, 33.3 percent compared to 29.6 percent for both Rural and Wayne residents and 28.5 percent for Federal reservation residents. (Table 26)

TABLE 26: SELF RATED HEALTH BY STRATA

	FEDERAL N = 246	URBAN N = 324	RURAL N = 388	WAYNE N = 260	TOTAL N = 1218
EXCELLENT	28.5	33.3	29.6	29.6	30.4
GOOD	48.8	45.7	50.3	53.5	49.4
FAIR	17.5	18.8	17.3	13.8	17.0
POOR	3.7	2.2	1.8	2.7	2.5
VERY POOR	1.6	0.0	1.0	0.4	0.7

Self-rated health varies by age with an increasing number reporting their health as fair or poor, beginning with age 20. (Table 27) Over 15 percent age 20 to 29 and 44.8 percent age 60 and older state their health is fair, poor or very poor.

FIGURE 4: COMPARISON OF SELF RATED HEALTH WITH SAIAN' AND U.S.POPULATION(NMES)² 1987
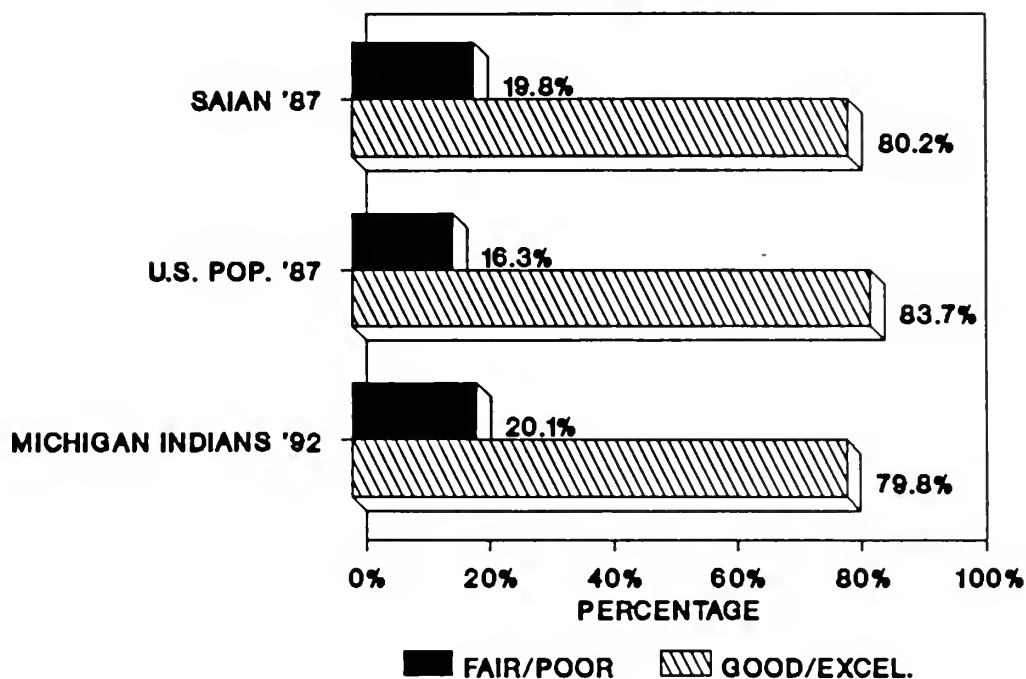
¹ Survey of American Indians and Alaskan Natives
² National Medical Expenditure Survey

Health status is also reflected in poverty rates with those at or near poverty reporting worse health. A cross-sectional database cannot determine cause or effect but much previous research has established the strong relationship between poverty status and consequent health conditions. Figure 5 shows that of those who rate their health as very poor 55.6 percent are at or near poverty; of those who rate their health as poor 53.8 percent are at or near poverty; and of those who rate their health as fair 47.9 percent are at or near poverty--figures far in excess of the 38.4 percent of the total sample who are at or near poverty.

TABLE 27: SELF RATED HEALTH BY AGE *

AGE	HEALTH STATUS			
	EXCELLENT	GOOD	FAIR	POOR/VERY POOR
0 - 5 (72)	55.6 (40)	44.4 (32)	0 (0)	0 (0)
5 - 14 (229)	48.9 (112)	45.9 (105)	4.4 (10)	0.9 (2)
15 - 19 (120)	50.8 (61)	40.8 (49)	8.3 (10)	0 (0)
20 - 29 (149)	26.2 (39)	58.4 (87)	14.1 (21)	1.3 (2)
30 - 39 (178)	23.0 (41)	55.1 (98)	21.9 (39)	0 (0)
40 - 49 (195)	16.9 (33)	55.4 (108)	22.6 (44)	5.1 (10)
50 - 59 (106)	17.0 (18)	49.1 (52)	28.3 (30)	5.6 (6)
60+ (152)	11.2 (17)	44.1 (67)	33.6 (51)	11.2 (17)
TOTAL	30.1 (361)	49.8 (598)	17.1 (205)	3.0 (37)

* Chi-square significant at 0.0000.

Illness, Diseases, Conditions Reported by Health Professional

Respondents were asked whether a health professional had informed them within the past year of a number of illnesses, diseases or conditions. In Table 28 the percent of the total (all age) population and breakdowns by strata are presented in rank order. Vision problems are the most common (28.5%), followed by arthritis (17.5%), allergies (16.3%), high blood pressure (15.1%), back problems (14.8%),

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TABLE 28: PERCENT WITH ILLNESS, DISEASE OR IN CONDITION AS REPORTED BY A HEALTH PROFESSIONAL WITHIN THE PAST YEAR BY STRATA

ILLNESS	FEDERAL N = 253	URBAN N = 328	RURAL N = 391	WAYNE N = 268	TOTAL N = 1240
VISION	25.8	21.5	34.7	30.3	28.5
ARTHRITIS	16.5	18.2	18.4	16.1	17.5
ALLERGY	12.8	17.2	17.1	17.2	16.3
HIGH BLOOD PRESSURE	15.2	14.2	13.8	17.7	15.1
BACK PROBLEMS	12.7	17.8	14.8	13.0	14.8
CHOLESTEROL	14.0	11.5	9.1	13.1	11.6
HEARING LOSS	8.6	8.6	11.7	11.1	10.1
PHYSICAL DISABILITY	11.1	8.0	9.4	9.6	9.4
DIABETES	6.6	6.8	8.6	6.9	7.3
ASTHMA	8.6	8.3	4.7	6.9	6.9
HEART	5.3	4.6	7.3	8.5	6.4
EMOTIONAL	6.6	4.6	5.7	7.7	6.0
EMPHYSEMA	7.4	4.0	4.4	3.8	4.8
STOMACH ULCERS	4.9	3.4	4.2	4.2	4.1
THYROID	2.1	2.8	3.9	3.8	3.2
STROKE	2.5	1.8	2.1	4.6	2.6
CANCER	2.0	1.2	0.8	3.5	1.7
KIDNEY	1.2	1.8	0.8	2.3	1.5
LIVER	1.6	0.6	0.5	2.3	1.2
TB	0.0	0.3	0.8	1.5	0.7
HEPATITIS	0.4	0.3	0.8	0.4	0.5
FETAL ALCOHOL	0.4	0.3	0.3	0.0	0.3

FIGURE 5: PERCENT AT OR BELOW 125% OF POVERTY BY SELF RATED HEALTH STATUS
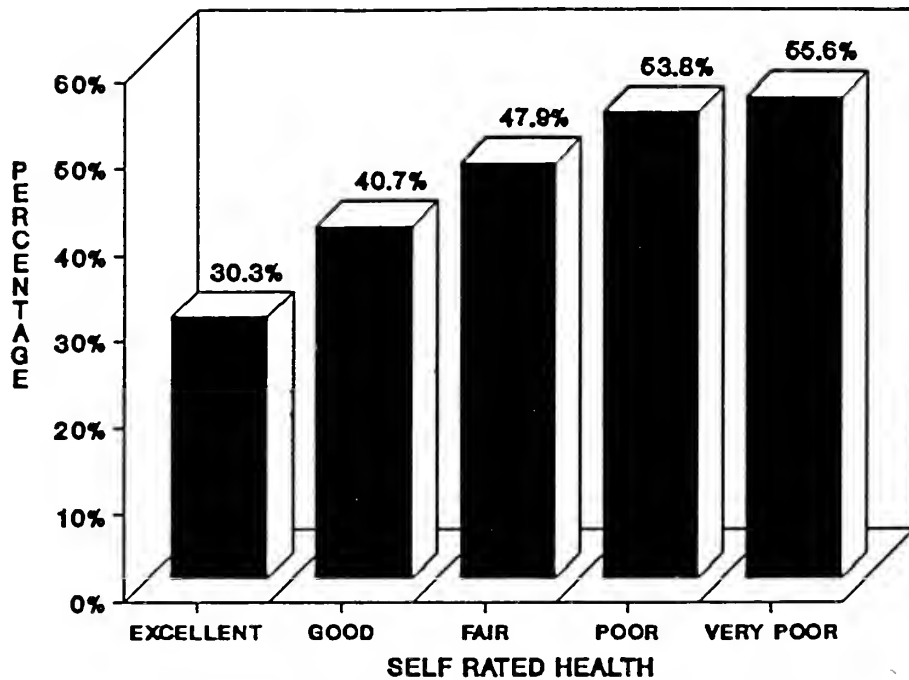
Chi-square is significant at 0.002 level or less.

high cholesterol (11.6%), hearing loss (10.1%), physical disability (9.4%) and diabetes (7.3%). The rank order varies some by strata with the most pronounced differences reported by the Wayne County residents who report proportionately more cholesterol problems, higher incidence of high blood pressure, heart problems, strokes and cancer. This stratum is slightly older in age and these conditions do increase proportionately with age as seen in Table 29 where these same conditions are shown by age and sex.

TABLE 29: PERCENTAGE WITH ILLNESS, DISEASE OR CONDITION (BY SEX AND AGE) AS REPORTED BY A HEALTH PROFESSIONAL WITHIN THE PAST YEAR.

TYPE OF ILLNESS	MALE N = 564							FEMALE N = 630						
	0-14	15-19	20-29	30-39	40-59	60+	TOTAL	0-14	15-19	20-29	30-39	40-59	60+	TOTAL
VISION*	11.9	29.1	18.2	12.0	40.0	47.8	25.4	13.6	16.4	37.8	29.3	39.5	56.1	31.7
ARTHRITIS*	0.0	1.3	3.0	7.2	23.0	55.1	13.8	0.0	1.5	7.3	17.4	32.9	64.6	20.8
ALLERGY	9.4	14.8	21.2	13.3	17.9	10.1	14.0	12.9	9.0	23.2	21.5	22.1	23.2	18.9
HIGH BLOOD PRESSURE*	0.6	5.6	3.0	15.7	24.3	35.3	15.8	0.7	0.0	6.1	10.8	20.3	52.5	14.6
BACK PROBLEM*	1.2	1.9	7.6	16.9	25.9	26.1	13.2	1.4	3.0	9.8	16.1	29.9	32.9	16.5
CHOLESTEROL PROBLEM*	0.0	1.9	3.0	8.4	24.4	25.0	10.7	0.0	1.5	7.3	13.0	18.8	35.4	12.6
HEARING LOSS*	3.7	0.0	3.0	3.6	15.5	44.1	11.0	3.6	3.0	7.3	4.3	10.2	30.5	9.4
PHYSICAL DISABILITY*	0.0	7.4	3.0	7.2	15.7	36.2	10.2	0.0	1.5	7.3	5.4	7.2	36.6	8.6
DIABETES*	0.6	1.9	0.0	0.0	11.9	21.7	5.8	0.9	1.5	1.2	6.5	35.7	28.4	8.9
ASTHMA	7.9	9.4	10.6	4.8	3.7	5.8	6.5	7.8	6.0	9.8	3.2	7.8	9.9	7.5
HEART DISEASE*	0.1	1.9	1.5	4.8	10.4	27.5	7.1	2.9	0.0	0.0	1.1	5.4	28.0	5.9
EMOTIONAL PROBLEM	4.4	5.6	7.6	8.4	1.5	7.2	5.1	5.7	6.0	7.3	7.6	6.0	8.6	6.7
EMPHYSEMA*	1.9	7.4	0.0	2.4	5.9	18.8	5.3	2.9	1.5	4.9	4.3	4.2	9.8	4.4
STOMACH ULCERS*	0.0	0.0	1.5	4.8	5.2	11.6	3.5	0.0	0.0	4.9	5.4	6.6	12.3	4.8
THYROID PROBLEM	0.0	1.9	3.0	0.0	4.4	1.4	1.2	0.7	0.0	2.4	5.4	7.8	12.3	4.9
STROKE*	0.0	1.9	1.5	0.0	2.2	17.4	3.0	0.0	0.0	1.2	0.0	1.2	14.8	2.4
CANCER*	0.0	0.0	0.0	0.0	2.3	17.4	2.7	0.0	1.5	0.0	0.0	1.8	2.4	1.0
KIDNEY PROBLEM	0.0	0.0	0.0	3.6	2.3	1.4	0.7	0.7	0.0	2.4	1.1	3.0	6.2	2.2
LIVER PROBLEM	0.0	0.0	0.0	3.6	3.0	2.9	1.6	0.0	0.0	0.0	1.1	1.8	1.2	0.8
TUBERCULOSIS	0.0	0.0	0.0	2.4	1.5	2.9	1.1	0.0	0.0	0.0	1.1	0.6	0.0	0.3
HEPATITIS	0.0	0.0	0.0	1.2	0.7	1.4	0.5	0.0	0.0	0.0	1.1	1.2	0.0	0.5
FETAL ALCOHOL	0.0	0.0	0.0	0.0	0.8	1.5	0.4	0.0	1.5	0.0	0.0	0.0	0.0	0.2

* Age difference significant at ≤ 0.05 level.

Illness, Disease, Conditions by Sex and Age

Differences exist between male and female rates within age groups in specific chronic diseases or illnesses. (Table 29) Men ages 40 to 59 were nearly twice as likely to report heart disease as were women (10.4 percent compared to 5.4 percent). Beginning at age 30 women are significantly more likely to have arthritis. At ages 60 and over men report more hearing loss (44.1 percent compared to 30.5 percent), emphysema (18.8 percent compared to 9.8 percent) and cancer (17.4 percent compared to 2.4 percent) while women report more vision problems, arthritis, allergies, high blood pressure, back problems, cholesterol problems, diabetes, thyroid and kidney problems. The only conditions that do not increase significantly with age are allergies, asthma, emotional problems, thyroid, kidney or liver problems, tuberculosis, hepatitis and fetal alcohol syndrome.

Figure 6 charts selected diseases by sex of the household member and shows that 71.4 percent of cancer victims are male, while those with diabetes and arthritis are predominantly female (63 percent); allergies are reported by more females as well (60 percent) and thyroid problems are suffered mostly by females (81.6 percent).

Many chronic diseases are no more prevalent in American Indians than in the U.S. population in general. Again, comparing the SAIAN and NMES surveys with the Michigan Health Profile our state figures are similar enough to national figures to increase our confidence in the health findings. (Table 30) There is little difference across

FIGURE 6: SELECTED DISEASES BY SEX OF HOUSEHOLD MEMBER

DISEASE

Disease	Males	Females
DIABETES	37%	63%
ARTHRITIS	37.7%	62.3%
CANCER	71.4%	28.6%
THYROID	18.4%	81.6%
ALLERGY	40%	60%

PERCENTAGE: 0% 20% 40% 60% 80% 100%

■ MALES ▨ FEMALES
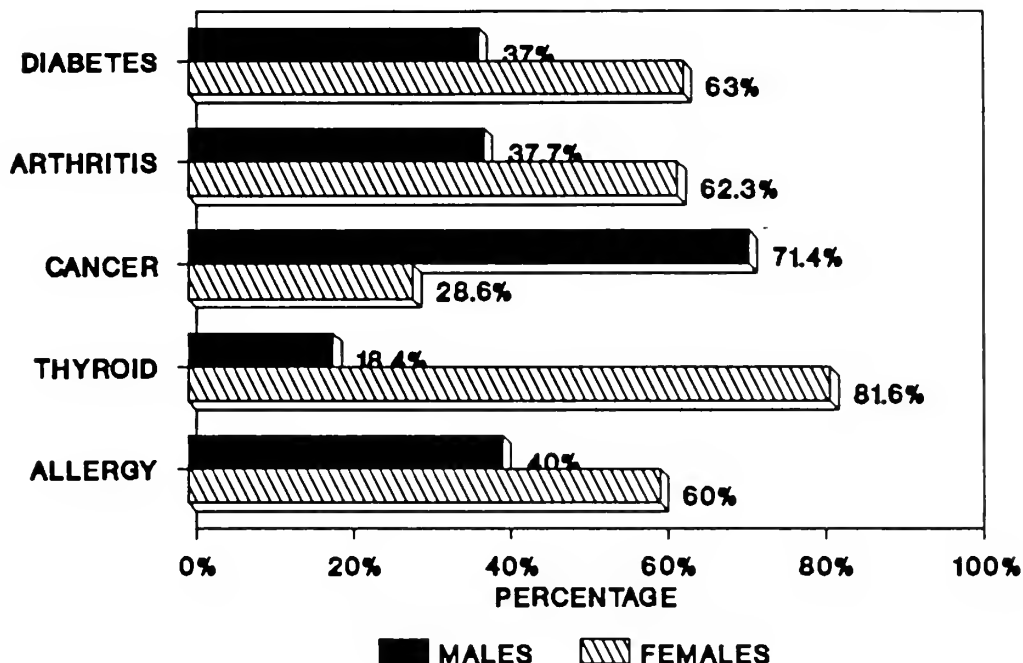
populations in cardiovascular disease among persons 18 and older in the three surveys with 8.9 percent of Michigan Indians, 9.8 percent of SAIAN and 10 percent of the NMES survey reporting cardiovascular problems. The same is true for high blood pressure with 22 percent across the three surveys reporting this condition. The Michigan American Indian age 18 and over is more likely to report arthritis or emphysema, but other factors may explain these findings, including climate and smoking habits.

Diabetes is more prevalent in both the SAIAN and the Michigan Indian population than the U.S. population and the differences are more than twofold. Diabetes is reported to have attained epidemic proportions in some tribes in the West and diabetes-related death rates for U.S. Indians is

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TABLE 30: COMPARISON OF CHRONIC CONDITIONS BETWEEN MICHIGAN INDIANS, THE 1987 SURVEY OF AMERICAN INDIANS AND ALASKAN NATIVES AND THE U.S POPULATION (NMES) AGES 18 AND OLDER

CONDITION	MICHIGAN INDIANS[1] N=1240	SAIAN[2] N=	U.S. POPULATION[3] N=
CARDIOVASCULAR	8.9%	9.8%	10.0%
HIGH BLOOD PRESSURE	22.1	22.7	22.8
DIABETES	10.7	12.2	5.2
EMPHYSEMA	5.9	1.8	2.5
ARTHRITIS	25.9	19.7	20.4

3 Source: Agency for Health Care Policy and Research. National Medical Expenditure Survey -
2 Source: Survey of American Indians and Alaskan Natives and Household Survey, 1987.
1 Source: 1992 Michigan American Indian Health Profile.

2.3 times that of the general population. (Sievers and Fisher, 1981). For those age 18 and over 10.7% of Michigan Indians and 12.2% of SAIAN compared to 5.2% of the NMES respondents (all races) report having diabetes.

Table 29 figures show the percentages of diagnosed diabetes cases by sex and age. The percentages rise dramatically with age, indicating adult onset diabetes as has been seen in other Indian populations in North America. Age 40 appears to be where the increase begins. The incidence for females is much higher than for males, which is also consistent with national data. Diabetes is virtually non-existent for the males under 40, but 11.9% of males between age 40 and 59 have diabetes. The same pattern prevails for females but for a larger number --35.7% of females between 40 and 59 report diabetes. The sex-age differences appears to level off some in older Indians -- among males age 60 and older, 21.7% have diabetes compared to 28.4% of females.

These figures may represent the "tip of the iceberg". In studies of self reports, followed by actual clinical screenings, the percentage of American Indians with the disease rose considerably, sometimes by half. Clearly, diabetes and its related complications which can be numerous, is a serious problem in Michigan's Indian population and there is a critical need for early diagnosis and treatment as well as education and counseling programs in nutrition and exercise.

Symptoms Within the Past Year

Respondents were presented with a long list of symptoms and asked whether they or their household members had experienced each of them over the past year . In Table 31 the percent of the total (all age) population and breakdowns by strata are presented in rank order. Pain in the joints was the most common symptom (25.3%), followed by flu or fever (23.7%), frequent colds or cough (23.1%), frequent headaches (20%), teeth and gum problems (16.4%), frequent stomach upsets (14.7%), skin problems (14.1%), depression (13.1%), chest pain (11.2%), diarrhea (11.2%), hearing loss (10.4%), vision problems (10.4%) and numbness or loss of feeling (10%). Their are slight differences in rank order within the four strata. More significantly, however, is the disproportionate percentages in the rural and federal reservation strata who report symptoms. These residents are more likely to suffer flu or fever, colds or coughs, stomach upsets, teeth and gum problems, skin problems diarrhea, , frequent swelling, drinking problems and gynecological problems than are residents of the Wayne or Urban strata. Federal reservation residents are more likely to report depression and vision problems than the other three strata.

Symptoms by Sex and Age

Differences exist between male and female rates within age groups in specific symptoms reported. (Table 32) Men were more likely to report hearing loss with 12% of males compared to 8.7% of females reporting this problem and those age 60 and over were most affected. In this age group, the male-female difference was even more pronounced with 49.3% of males and 25.9% of females over 60 saying they had hearing losses over the past year. The only other symptom more common to males was drinking problems reported by 1.7% of females and 8.2% of males. The age groups most affected were between 20 and 40 with slight decreases in the older cohorts. Females were more likely to experience pain in joints, flu or fever, frequent headaches, depression, frequent earaches, memory problems and frequent swelling. and the pain in joints, depression, memory problems and swelling all increased with age, especially after age 60. The age differences were statistically significant for the two symptoms experienced more frequently by males, drinking problems and hearing loss, as well as joint pains, depression, chest pain, vision problems, and memory problems, all of which increased with age. Older males (over 60) were the most likely to report chest pain, 30.4% compared to 22% for females of the same age. Perhaps this is related to older male reports of emphysema. Frequent earaches, flu and fever, and colic were experienced more frequently by the younger cohort, age 0 to 14.

TABLE 31 : PERCENT REPORTING SYMPTOMS WITHIN THE PAST YEAR BY STRATA

SYMPTOMS	FEDERAL N = 248	URBAN N = 326	RURAL N = 388	WAYNE N = 260	TOTAL* N = 1222
PAIN IN JOINTS	24.6	20.9	30.5	24.0	25.3
FLU/FEVER	28.6	21.5	28.4	14.9	23.7
FREQUENT COLD/COUGH	30.2	17.8	26.3	18.1	23.1
FREQUENT HEADACHES	20.2	14.5	27.1	16.2	20.0
TEETH/GUM PROBLEMS	15.7	12.3	21.6	14.2	16.4
FREQUENT STOMACH UPSETS	19.0	8.0	20.5	10.3	14.7
SKIN PROBLEMS	16.2	13.8	15.8	10.0	14.1
DEPRESSION	14.6	12.9	12.9	12.0	13.1
CHEST PAIN	15.3	8.9	10.4	11.2	11.2
DIARREHEA	17.4	5.9	13.5	8.5	11.2
HEARING LOSS	9.3	9.3	12.2	10.0	10.4
VISION PROBLEMS	12.2	7.1	11.6	10.9	10.4
NUMBNESS/LOSS OF FEELING	11.3	8.0	12.7	7.3	10.0
FREQUENT EARACHES	9.3	7.7	8.5	5.4	7.8
MEMORY PROBLEMS	8.9	6.7	8.3	6.9	7.7
FREQUENT SWELLING	8.1	5.6	9.1	6.2	7.3
DRINKING PROBLEMS	6.9	2.6	6.1	3.2	4.7
DEHYDRATION	2.4	1.5	1.8	1.6	1.8

SYMPTOMS	FEDERAL N = 24	URBAN N = 45	RURAL N = 59	WAYNE N = 26	TOTAL N = 154
COLIC	4.2	0.0	3.4	11.5	3.9

SYMPTOMS	FEDERAL N = 130	URBAN N = 185	RURAL N = 214	WAYNE N = 131	TOTAL N = 660
GYNECOLOGICAL PROBLEMS	12.3	9.7	13.1	6.9	10.8

* N's vary from 1136 to 1222.

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TABLE 32: PERCENTAGE REPORTING SYMPTOMS (BY SEX AND AGE) WITHIN THE PAST YEAR.

SYMPTOMS	MALE N = 564							FEMALE N = 630						
	0-14	15-19	20-29	30-39	40-59	60+	TOTAL	0-14	15-19	20-29	30-39	40-59	60+	TOTAL
PAIN IN JOINTS*	3.1	11.1	9.2	22.9	29.6	62.3	21.1	3.6	11.9	22.0	32.6	42.2	67.1	29.6
FLU/FEVER	30.6	16.4	15.2	20.5	17.0	10.1	20.2	35.9	31.3	27.7	31.6	19.8	18.3	27.2
FREQUENT COLD/COUGH	23.1	26.8	15.2	18.1	19.3	30.4	21.8	26.1	23.9	34.9	23.2	17.5	24.4	24.1
FREQUENT HEADACHES	11.9	25.5	9.1	11.0	15.6	16.2	14.1	13.4	23.9	33.7	33.7	29.9	21.0	25.5
TEETH/GUM PROBLEMS	7.5	1.8	19.7	21.7	23.0	20.3	15.6	13.4	10.4	19.3	15.8	20.4	20.7	17.0
FREQUENT STOMACH UPSET	11.3	7.3	4.5	15.7	17.8	23.2	13.8	12.1	23.9	14.5	12.6	10.8	29.3	15.6
SKIN PROBLEM	9.4	18.2	9.1	9.6	15.0	13.0	12.0	14.9	19.4	19.3	13.7	11.4	25.6	16.2
DEPRESSION*	0.0	1.9	15.2	14.5	11.1	18.8	9.0	4.9	14.9	14.5	28.4	18.0	24.7	16.7
DIARRHEA	8.8	9.3	4.5	10.8	13.3	14.5	10.4	12.7	6.0	13.4	13.7	12.0	13.8	12.2
CHEST PAIN*	0.6	1.9	4.5	13.3	20.1	30.4	11.3	3.6	4.5	9.6	11.6	15.0	22.0	11.0
GYNECOLOGICAL PROBLEMS	-	-	-	-	-	-	0.0	3.7	16.7	13.4	20.0	10.5	7.7	11.2
VISION PROBLEM*	3.2	7.3	7.6	3.8	16.3	24.6	9.9	3.5	10.4	12.2	4.2	10.2	30.9	10.7
HEARING LOSS*	2.5	0.0	4.5	3.7	17.9	49.3	12.0	2.9	4.5	8.4	6.4	8.4	25.9	8.7
NUMBNESS/LOSS OF FEELING	0.6	0.0	1.5	15.7	13.3	26.1	9.0	2.1	4.5	4.8	15.8	13.3	28.4	11.1
FREQUENT EARACHES*	15.0	5.5	0.0	2.4	0.7	4.4	5.8	17.7	10.4	7.2	6.3	6.0	8.5	9.6
MEMORY PROBLEMS*	0.0	1.8	3.0	7.2	6.7	26.5	6.4	1.4	6.0	2.4	7.4	9.0	31.7	8.8
FREQUENT SWELLING	0.6	0.0	0.0	4.8	11.2	11.6	4.9	0.0	4.5	7.3	11.6	15.1	19.8	9.0
DRINKING PROBLEM*	0.0	7.4	11.1	14.6	10.4	8.8	8.2	0.0	4.8	4.9	1.1	1.2	0.0	1.7
COLIC	8.8	0.0	0.0	20.0	0.0	0.0	5.6	0.0	0.0	0.0	0.0	12.5	0.0	2.4
DEHYDRATION	0.0	0.0	1.5	1.2	3.7	2.9	1.6	0.7	3.0	3.7	1.1	0.0	7.3	2.1

* Age difference significant at 0.05 level.

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CHRONIC CONDITIONS REQUIRING SPECIFIC HEALTH AIDS OR DEVICES

The most frequently reported assistive aid or device needed was eye glasses (54%) , followed by dentures (17.3%) and hearing aides (5.3%). Table 33 shows the percent by strata who have need of a number of assistive aids or devices. There is little difference by strata.

Specific Unmet Needs for Health Aids or Devices

Next respondents were asked if they needed but did not have the various aids or devices. Table 34 shows both the number and percent who have unmet needs. The greatest unmet need is hearing aides with 54.1% of those who need reporting that they do not have a hearing aid. Since 5.3% of the sample report needing hearing aids this represents a large unmet need for this population. The situation is most severe for rural households where of those 5.4% who need, 76.2% report they do not have hearing aides.

TABLE 33: PERCENT REPORTING CONDITIONS REQUIRING HEALTH AIDS OR DEVICES

AIDS OR DEVICES	FEDERAL N = 248	URBAN N = 318	RURAL N = 387	WAYNE N = 257	TOTAL N = 1210*
HEARING AID	5.2	6.0	5.4	4.3	5.3
EYE GLASSES	49.2	57.9	52.7	55.8	54.0
DENTURES	15.7	13.9	19.3	20.2	17.3
SUPPORT HOSE	3.6	2.5	4.1	3.1	3.4
CANE	4.4	2.5	3.3	2.3	3.1
WALKER	1.6	0.6	0.3	2.7	1.2
WHEELCHAIR	2.0	1.3	1.5	2.7	1.8
LEG BRACE	2.0	0.3	1.0	1.6	1.2
BACK BRACE	2.8	1.3	1.3	0.8	1.5
ARTIFICIAL HEART	0.0	0.3	0.8	0.4	0.4
BRAILLE BOOKS	0.0	0.0	0.3	0.0	0.1
CATHETER	0.0	0.3	0.0	0.4	0.2
KIDNEY DIALYSIS	0.0	0.3	0.0	0.4	0.2

TABLE 34: SPECIFIC UNMET NEEDS

UNMET NEED - HEARING AID		FEDERAL N = 13	URBAN N = 16	RURAL N = 21	WAYNE N = 11	TOTAL N = 61
	YES	38.5	43.8	76.2	45.5	54.1
	NO	61.5	56.3	23.8	54.5	45.9

UNMET NEED - GLASSES		FEDERAL N = 118	URBAN N = 182	RURAL N = 204	WAYNE N = 142	TOTAL N = 646
	YES	21.2	9.3	21.1	12.0	15.8
	NO	78.8	90.7	78.9	88.0	84.2

UNMET NEED - DENTURES		FEDERAL N = 39	URBAN N = 44	RURAL N = 73	WAYNE N = 50	TOTAL N = 206
	YES	25.6	20.5	27.4	18.0	23.3
	NO	74.4	79.5	72.6	82.0	76.7

UNMET NEED - SUPPORT HOSE		FEDERAL N = 9	URBAN N = 8	RURAL N = 15	WAYNE N = 7	TOTAL N = 39
	YES	33.3	37.5	33.3	14.3	30.8
	NO	66.7	62.5	66.7	85.7	69.2

UNMET NEED - CANE		FEDERAL N = 11	URBAN N = 4	RURAL N = 13	WAYNE N = 6	TOTAL N = 34
	YES	36.4	50.0	15.4	0.0	23.5
	NO	63.6	50.0	84.6	100.0	76.5

UNMET NEED - WALKER		FEDERAL N = 4	URBAN N = 2	RURAL N = 1	WAYNE N = 6	TOTAL N = 13
	YES	25.0	0.0	0.0	33.3	23.1
	NO	75.0	100.0	100.0	66.7	76.9

UNMET NEED - WHEELCHAIR		FEDERAL N = 5	URBAN N = 3	RURAL N = 6	WAYNE N = 7	TOTAL N = 21
	YES	20.0	33.3	16.7	14.3	19.0
	NO	80.0	66.7	83.3	85.7	81.0

UNMET NEED - LEG BRACE		FEDERAL N = 5	URBAN N = 1	RURAL N = 4	WAYNE N = 4	TOTAL N = 14
	YES	40.0	0.0	0.0	25.0	21.4
	NO	60.0	100.0	100.0	75.0	78.6

UNMET NEED - BACK BRACE		FEDERAL N = 7	URBAN N = 4	RURAL N = 5	WAYNE N = 2	TOTAL N = 18
	YES	14.3	50.0	0.0	50.0	22.2
	NO	85.7	50.0	100.0	50.0	77.8

UNMET NEED - ARTIFICIAL HEART		FEDERAL N = 1	URBAN N = 0	RURAL N = 3	WAYNE N = 1	TOTAL N = 5
	YES	0.0	0.0	0.0	0.0	0.0
	NO	100.0	0.0	100.0	100.0	100.0

UNMET NEED - BRAILLE BOOKS		FEDERAL N = 0	URBAN N = 0	RURAL N = 1	WAYNE N = 0	TOTAL N = 1
	YES	0.0	0.0	100.0	0.0	100.0
	NO	0.0	0.0	0.0	0.0	0.0

UNMET NEED - CATHERTER		FEDERAL N = 0	URBAN N = 1	RURAL N = 0	WAYNE N = 1	TOTAL N = 2
	YES	0.0	100.0	0.0	100.0	100.0
	NO	0.0	0.0	0.0	0.0	0.0

UNMET NEED - KIDNEY DIALYSIS		FEDERAL N = 0	URBAN N = 1	RURAL N = 0	WAYNE N = 1	TOTAL N = 2
	YES	0.0	100.0	0.0	0.0	50.0
	NO	0.0	0.0	0.0	100.0	50.0

Though 54% of the respondents report needing glasses, 15.8% do not have eye glasses. Of the 17.3% who said they need them 23.3% do not have dentures. Though less than 4% of the population needs other types of devices or aids, for those few there is a substantial proportion whose needs remain unmet; for example 30.8% of support hose needs, 23.5% of canes, 23.1% of walker, 22.2% of back brace, 21.4% of leg brace, 19% of wheelchair need remains unmet. Other, aids which are rarely needed were mentioned by so few in number that percentages are deceptive. Five persons said they had artificial hearts -- it is likely that these persons misunderstood the question to mean devices such as heart monitors or bypass surgery. Only two persons needed catheters and kidney dialysis and one needed braille books.

FIGURE 7: PERCENT AT OR BELOW 125% OF POVERTY BY NUMBER OF UNMET HEALTH AIDS/DEVICES
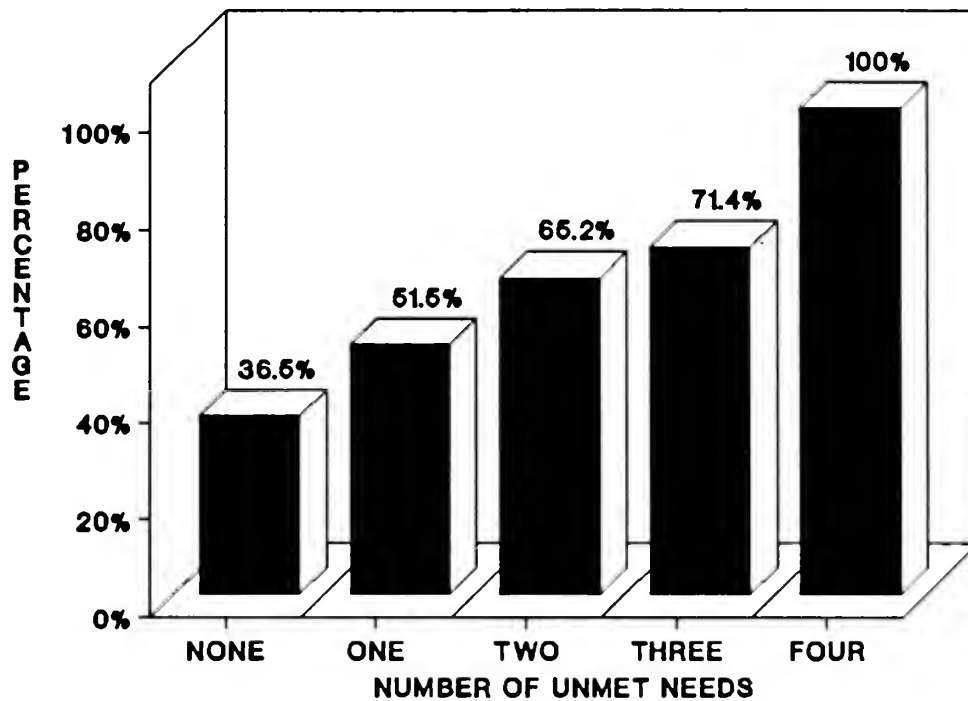
Chi-square is significant at 0.0000 level or less.

The need for multiple aids is associated with poverty. Of those who have no unmet need, 36.5% are at or below 125% of poverty, compared to those with one (51.5%), two (65.2%), three (71.4%) or four (100%) unmet needs. (Figure 7) Being at or near poverty makes it difficult to afford many of these health aids or devices that are not reimbursable by third-party insurers such as medicaid or medicare.

CHAPTER VIII
USE OF HEALTH SERVICES

In this section we will discuss access issues such as source and payment of medical/health services, as well as services used, and services needed but unavailable. The availability and affordability of health and medical services is a major predictor of use.

Source of Medical Service

Many people unfamiliar with American Indian health services coverage assume that Indian Health Services is the provider and insurer for all American Indians. This is not true. Many of course obtain private health insurance--especially if offered through an employee plan. Services provided directly in IHS facilities are not uniform across IHS service areas and therefore may not be available to even some reservation-based Indians.

In areas where no services are offered IHS provides contract services to people eligible for coverage. However, these contract services are limited and only available if all other sources have been exhausted. Wayne County has an Urban IHS facility and there are a number of tribal clinics throughout the state.

The State of Michigan Department of Public Health contributes to Indian health by funding Community Health Representatives (CHRs) around the state. They are semi-skilled health workers who provide outreach to many urban and rural off-reservation Indians. For many rural Indians they are the only health professional with whom they have contact.

Table 35 shows the primary source of medical service used by

Michigan Indians in the four strata. The majority use a private doctor (60.6%) and this is especially true for the Urban (non-Detroit) Indian (72.6%) and the rural (69.9%) who have the least access to IHS or tribal clinics. Only 33.5% of reservation-based Indians use private doctor's as their primary source of care, and as expected 58.1% use the tribal health clinics, compared to 13.5% statewide. None of the urban strata Indians use tribal clinics and 4.4% of rural and 1.2% of Wayne County Indians reported this source as their primary provider. Urban Indian Health services is the main source of care for 11.6% of the Wayne strata.

TABLE 35: SOURCE OF MEDICAL SERVICE

SOURCE	FEDERAL N = 248	URBAN N = 325	RURAL N = 386	WAYNE N = 258	TOTAL N = 1217
COUNTY HEALTH	0.4	2.2	1.0	1.9	1.4
TRIBAL HEALTH CLINIC	58.1	0.0	4.4	1.2	13.5
EMERGENCY ROOM	0.4	4.3	2.8	1.6	2.5
PRIVATE DOCTOR	33.5	72.6	69.9	57.8	60.6
URBAN INDIAN HEALTH	0.0	0.0	1.3	11.6	2.9
COMMUNITY HEALTH CLINIC	4.0	7.1	3.6	5.4	5.0
OUTPATIENT MEDICAL CLINIC	1.6	5.5	14.2	4.3	7.2
HMO	0.0	5.2	0.0	12.8	4.1
TRIBAL HELPER	0.0	0.0	0.3	0.4	0.2
OTHER	0.8	0.9	1.0	1.9	1.2
DON'T USE SERICES	1.2	2.2	1.3	1.2	1.5

Sixty-seven percent of the total sample report having had a medical check-up within the past year. Rural residents are least likely to have had a check-up with 61.6% and Wayne county residents are most likely to have had a check-up with 72.5% reporting seeing a health professional for a check-up.

	FEDERAL N = 244	URBAN N = 325	RURAL N = 385	WAYNE N = 258	TOTAL N = 1212
YES	67.6	70.5	61.6	72.5	67.5

Payment Source/Insurance

The extent and type of insurance coverage among the Michigan Indian population has implications for both the state and resources available through IHS. IHS seeks reimbursement from other sources for services provided in their facilities and covers only those portions not covered by other public or private plans. Even if IHS facilities were accessible to all Michigan Indians without other sources of care, IHS would not be able to meet the demand. Given the current health care system private insurance is the preferred method of coverage, with 81% of the nation's white population in 1987 covered by private methods. The SAIAN population on the other hand had both higher rates of public coverage and higher rates of no coverage than did whites. Michigan's Indians are similar to the SAIAN in that 51.2% report some type of private coverage, while 15.5% are covered by Medicaid, 4.6% by Medicare, 13.6% use some type of Indian-specific provider (IHS, Tribal Clinics), 2.8% use combinations of public insurance and 12.1% report have no insurance. (Table 37 and Figure 8)

Insurance Coverage for Older Indians

Of those age 65 and over only 22.2% rely on employee or individual (private) sources of payment. Sixty-four percent have some type of public insurance coverage--40.7% have

medicare, 9.3% have medicaid and 13.9% have some combination of medicare and medicaid. Only 1.9% report having no insurance.

TABLE 37: TYPE OF INSURANCE OR MEDICAL PAYMENT METHOD

TYPE OF PAYMENT/INSURANCE	FEDERAL N = 247	URBAN N = 317	RURAL N = 389	WAYNE N = 257	TOTAL N = 1210
EMPLOYEE GROUP HEALTH	31.6	53.9	40.4	57.2	45.7
INDIVIDUAL POLICY	3.2	8.2	5.1	5.1	5.5
MEDICAID(MA)	9.3	17.4	20.3	12.1	15.5
MEDICARE(MC)	2.8	3.2	5.4	7.0	4.6
INDIAN TRIBAL/IHS	40.1	3.2	10.8	5.4	13.6
OTHER COMBINATIONS/PUBLIC	6.5	1.6	1.5	2.1	2.9
NO INSURANCE	6.5	12.6	16.5	10.5	12.1

Out-of-Pocket Medical Costs

The average out of pocket costs for medical expenses for the total Michigan Indian sample was $216 per household member, with costs higher for the Wayne county residents ($272) and Urban ($266) than the Rural ($170) and Federal Reservation resident ($166).

TABLE 38: MEAN AND MEDIAN ANNUAL MEDICAL EXPENSES

	FEDERAL N = 226	URBAN N = 299	RURAL N = 378	WAYNE N = 240	TOTAL N = 1143
MEAN	166.62	266.36	170.23	272.13	216.10
MEDIAN	12.5	100.0	40.0	32.5	50.0

FIGURE 8A: INSURANCE AND MEDICAL PAYMENT COVERAGE - ALL AGES

PAYMENT SOURCE

NO INSURANCE — 12.1%

EMPLOYEE INSURANCE — 45.7%

MEDICAID — 15.5%

INDIVIDUAL POLICY — 5.5%

MEDICARE — 4.6%

TRIBAL CLINIC/IHS — 13.3%

COMBINATIONS/PUBLIC — 2.8%

0% 10% 20% 30% 40% 50% 60%

PERCENTAGE
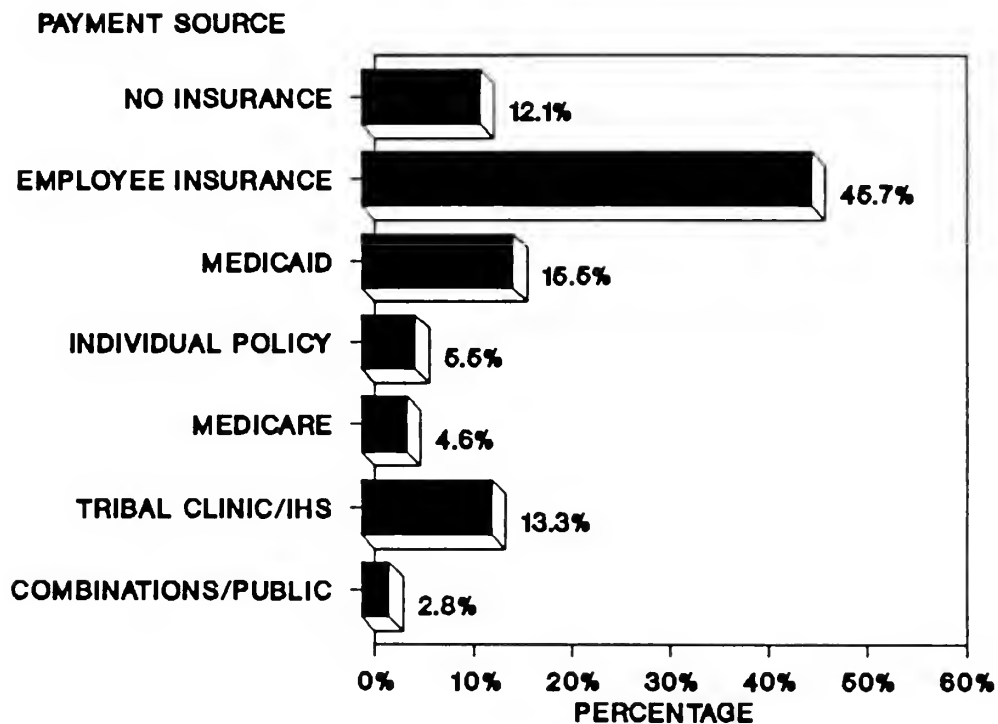
FIGURE 8B: INSURANCE AND MEDICAL PAYMENT COVERAGE - AGE 65yrs. AND OVER

NO INSURANCE — 1.9%

EMPLOYEE INSURANCE — 11.1%

MEDICAID — 9.3%

INDIVIDUAL POLICY — 11.1%

MEDICARE — 40.7%

IHS/TRIBAL CLINIC — 12%

COMBINATION/PUBLIC — 13.9%

0% 10% 20% 30% 40% 50%
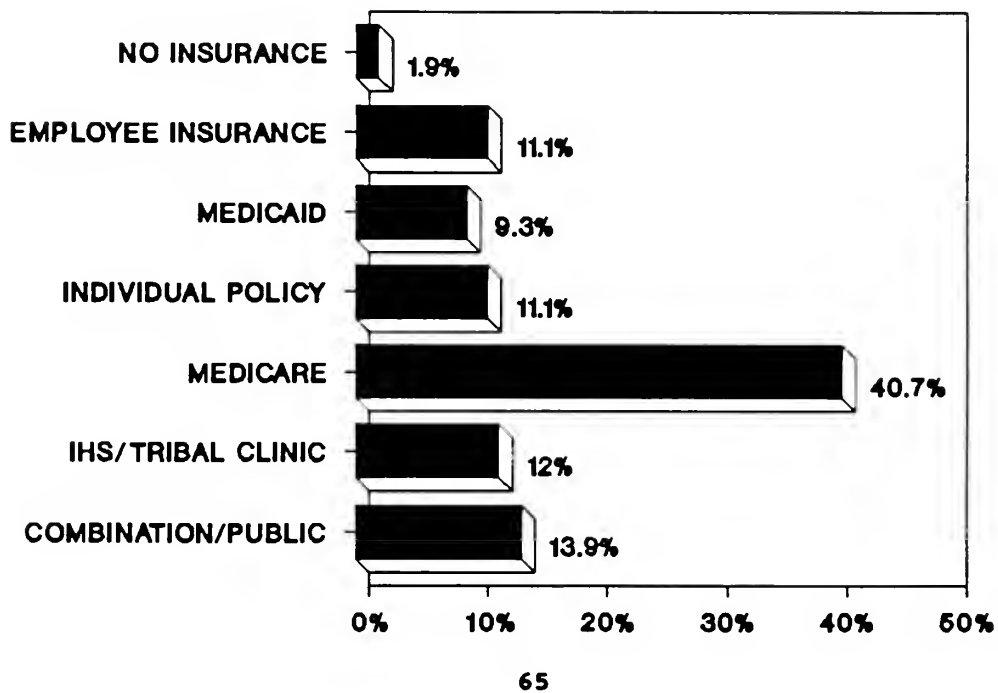
Services Used in Past Year

Respondents were given a list of twenty-four medical and health services many of which are preventive in nature and asked whether each household member had used any of the services in the past year. Table 39 shows the percent of the state total, and each strata, who used the service. No one service was used by more than 33% of the population and the majority of the services (16) were used by less than 4%.

The service used by the most people was Dental Services with 33% stating they had used these services in the past year. Given the usual prescription to see a dentist at least once a year, the 67% who did not use dental services seems quite high. The questionnaire did not have a specific section focused on dental care but looking at pieces of evidence from three other tables, 16.4% reported teeth or gum problems (Table 31), 23.3% of those who need dentures do not have them (Table 33), and dental services was the most frequently mentioned unavailable service (Table 41). As dental care is often not covered by private insurance plans and public coverage is very limited.

The second most used service was vision screening, used by 20.4% of the respondents. Among strata, those on federal reservations were most likely to have used vision screening (26.3%). The third most commonly used service was WIC, Women Infants & Children nutritional program used by 13.4% statewide. This service was most used by reservation residents also (23.1%) and rural (14.7%), compared to 8.7% of urban and 6.9% of Wayne residents.

Immunization services were used by 12.7%, again reservation residents being the most likely to use these services (15.7%). Immunization is an important preventive procedure,

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for children as well as adults. Further study of specific immunization types by age is recommended.

Obstetric-gynecological services were used by 10.6% overall, CHRs were used by 10.5%, with the heaviest usage being in the rural areas where 21.7% reporting having used CHR services. Hearing-screening services were used by 9.3% statewide, but reservation residents availed themselves of these services significantly more than did the other strata with 13.8% having used hearing screening compared to 5.8% in the urban, 9.3% in both rural and Wayne county strata. Social services were used by 8.3% statewide. By strata, the rural resident was more likely to have used social services with 11.8% compared to 7.4% of Wayne, 6.5% of urban and 6.1% of federal reservation residents.

TABLE 39: SERVICES USED IN THE PAST YEAR

FAMILY PLANNING		FEDERAL N = 187	URBAN N = 241	RURAL N = 301	WAYNE N = 211	TOTAL N = 940
	YES	4.8	4.1	5.6	0.5	3.9

TEEN PREGNANCY PREVENTION		FEDERAL N = 133	URBAN N = 180	RURAL N = 258	WAYNE N = 159	TOTAL N = 730
	YES	0.8	0.6	1.6	1.9	1.2

PRENATAL CARE		FEDERAL N = 103	URBAN N = 149	RURAL N = 194	WAYNE N = 111	TOTAL N = 557
	YES	2.9	0.0	3.1	5.4	2.7

.		FEDERAL N = 247	URBAN N = 325	RURAL N = 389	WAYNE N = 258	TOTAL N = 1219
DENTAL SERVICES	YES	29.1	35.7	35.7	29.1	33.0
HOME HEALTH CARE	YES	5.3	1.5	0.5	1.2	1.9
SUBSTANCE ABUSE SERVICES	YES	3.6	0.6	2.3	1.6	2.0
MENTAL HEALTH	YES	6.5	1.8	4.4	2.3	3.7
SOCIAL SERVICES	YES	6.1	6.5	11.8	7.4	8.3

		FEDERAL N = 247	URBAN N = 325	RURAL N = 388	WAYNE N = 258	TOTAL N = 1218
VISION SCREENING	YES	26.3	18.5	19.3	19.0	20.4
VISITING NURSE	YES	8.1	0.6	2.8	1.6	3.0
CHILDREN DAY CARE	YES	6.1	4.3	3.4	1.6	3.8
CAREGIVER RESPITE	YES	0.4	0.6	0.0	0.0	0.2
LEAD SCREENING	YES	4.4	0.3	0.3	1.9	1.5
TRADITIONAL HEALING	YES	0.0	0.0	1.0	1.2	0.6

		FEDERAL N = 143	URBAN N = 184	RURAL N = 238	WAYNE N = 131	TOTAL N = 696
WIC	YES	23.1	8.7	14.7	6.9	13.4

		FEDERAL N = 248	URBAN N = 325	RURAL N = 388	WAYNE N = 258	TOTAL N = 1219
IMMUNIZATIONS	YES	15.7	10.8	12.9	12.0	12.7

		FEDERAL N = 140	URBAN N = 186	RURAL N = 238	WAYNE N = 132	TOTAL N = 696
MATERNAL & INFANT SUPPORT	YES	2.1	0.0	3.8	1.5	2.0

EPSDT		FEDERAL N = 244	URBAN N = 323	RURAL N = 387	WAYNE N = 257	TOTAL N = 1211
	YES	4.1	0.6	0.8	0.0	1.2

CRIPPLED CHILDREN SERVICE		FEDERAL N = 246	URBAN N = 325	RURAL N = 388	WAYNE N = 258	TOTAL N = 1217
	YES	1.2	0.3	1.0	0.4	0.7

HEARING SCREENING		FEDERAL N = 247	URBAN N = 325	RURAL N = 388	WAYNE N = 258	TOTAL N = 1218
	YES	13.8	5.8	9.3	9.3	9.3

OB-GYN		FEDERAL N = 129	URBAN N = 184	RURAL N = 224	WAYNE N = 126	TOTAL N = 663
	YES	13.2	12.0	8.5	9.5	10.6

CHR'S		FEDERAL N = 248	URBAN N = 325	RURAL N = 387	WAYNE N = 257	TOTAL N = 1217
	YES	10.5	2.5	21.7	3.9	10.5

HOMEMAKER SERVICES		FEDERAL N = 247	URBAN N = 321	RURAL N = 385	WAYNE N = 257	TOTAL N = 1210
	YES	0.8	0.0	0.3	1.2	0.5

ADULT DAY CARE		FEDERAL N = 191	URBAN N = 270	RURAL N = 328	WAYNE N = 221	TOTAL N = 1010
	YES	0.0	0.7	0.0	0.0	0.2

OTHER SERVICES USED		FEDERAL N = 242	URBAN N = 304	RURAL N = 381	WAYNE N = 250	TOTAL N = 1177
	YES	4.1	5.3	5.5	1.2	4.2

These data support the notion that there is an advantage to living on or near a federal reservation in terms of service availability. Many of the services are publicly funded and targeted to lower income persons. Thus the urban (non-Detroit) strata were the least likely to have used most of the services mentioned, with the exception of two services most likely provided through private pay mechanisms--dental and children's day care. The one service most accessible to and used by rural residents is the CHR outreach program. The CHR service is intended to do just that.

Services Needed and Unavailable

What these data cannot tell us is the quality, the affordability, or the effectiveness of the services. However, we did ask about services needed but unavailable (Table 40) and 11.3% indicated they had needed some service that they could not get over the past year. Those in Rural areas were the most likely (16.4%) and those in Wayne county the least (6.4%) to find services unavailable.

TABLE 40: PERCENT REPORTING NEED FOR SERVICES THAT ARE UNAVAILABLE

	FEDERAL N = 244	URBAN N = 293	RURAL N = 384	WAYNE N = 251	TOTAL N = 1172
YES	11.1	8.9	16.4	6.4	11.3
NO	88.9	91.1	83.6	93.6	88.7

The services mentioned as needed but unavailable are shown in Table 41. Dental services were most mentioned (35.1%), followed by mental health support (25.7%), and vision (20.3%). Less than six percent mentioned five other services: general health services, women's health services,

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hearing services, substance abuse services, and physical therapy/rehabilitation services.

TABLE 41: SPECIFIC UNAVAILABLE SERVICES MENTIONED

SERVICES	FEDERAL N = 14	URBAN N = 20	RURAL N = 31	WAYNE N = 9	TOTAL N = 74
GENERAL HEALTH	0.0	0.0	12.9	0.0	5.4
MENTAL HEALTH SUPPORT	21.4	20.0	29.0	33.3	25.7
VISION	14.3	20.0	22.6	22.2	20.3
HEARING	0.0	10.0	0.0	0.0	2.7
DENTAL	50.0	35.0	32.3	22.2	35.1
SUBSTANCE ABUSE	7.1	0.0	0.0	11.1	2.7
WOMEN'S HEALTH	0.0	10.0	3.2	11.1	5.4
PT-OT & REHABILITION	7.1	5.0	0.0	0.0	2.7

CHAPTER IX
ATTITUDES CONCERNING ACCESS TO HEALTH RELATED SERVICES

This set of questions is asked of the respondent only. Questions about attitudes and opinions cannot be accurately assessed by a surrogate or informant.

Even when services are accessible, affordable and sufficient they are sometimes not used for other reasons. Among those reasons are the attitudes and perceptions of the people toward the service provider. When users perceive the provider to be insensitive to them or their cultural beliefs they are less likely to use the service. Another common reason for not using a service is that the service is perceived as inconvenient or unavailable. We asked a list of seventeen items that are related to perceptions of the service availability and accessibility as well as the cultural sensitivity of the provider. Respondents were given five response options: never true, not true most of the time, true sometimes, true most of the time or true all of the time.

Table 42 shows the responses at the extremes of the scale. Most respondents report quick emergency care most or all of the time-- only 5.5% state this is never true or not true most of the time, although the percentage is higher in the rural area with 8.6% saying they are able to receive quick emergency care never or seldom. Forty-six percent say they worry about medical costs all or most of the time, and in the rural areas 53% say costs are a worry. Fourteen percent report disrespectful medical staff and this situation is more common in the urban and Wayne strata and least common on the reservation.

Eleven percent report hours are inconvenient and the reservation and rural areas report this more often than the

TABLE 42: EVALUATION OF HEALTH SERVICE AND ATTITUDES TOWARDS PROVIDERS
PERCENT "NEVER TRUE OR NOT TRUE MOST OF TIME"

	FEDERAL	URBAN	RURAL	WAYNE	TOTAL**
EMERGENCY CARE	5.3%	2.2%	8.6%	5.4%	5.5%
WORRY ABOUT COST*	44.4%	43.6%	53.0%	42.5%	46.4%
STAFF DISRESPECTFUL*	10.6%	15.8%	13.7%	16.2%	14.2%
CONVENIENT HOURS	13.3%	9.5%	11.9%	8.6%	10.8%
45 min. WAIT*	19.0%	26.3%	23.9%	31.9%	25.5%
ENOUGH SPECIALISTS	52.8%	6.6%	38.3	13.4%	27.2%
SATISFIED CARE	5.3%	6.3%	12.0%	6.4%	7.9%
FACILITIES TOO FAR*	33.4%	15.8%	28.2%	19.4%	23.9%
KNOW WHERE TO GO WITH QUESTIONS	4.1%	7.4%	9.4%	6.5%	7.1%
TRANSPORTATION PROBLEMS*	21.3%	4.3%	15.3%	16.0%	13.9%
IMPORTANT PROVIDER NATIVE AMERICAN*	13.4%	8.5%	11.2%	13.1%	11.4%
YEARLY CHECK-UP	24.0%	24.2%	34.2%	21.3%	26.5%
SEE TRADITIONAL HEALER FIRST*	5.4%	10.8%	6.0%	7.6%	7.4%
FRIENDS INFORM	32.5%	61.1%	44.9%	58.4%	49.8%
PREFER NATIVE AMERICAN PROVIDER*	41.3%	23.4%	33.1%	29.7%	31.5%
UNCOMFORTABLE CURRENT SERVICE*	17.8%	17.0%	26.1%	15.9%	19.6%
PROVIDER NOT NATIVE-DOES NOT UNDERSTAND*	14.3%	20.9%	19.4%	13.8%	17.4%

** N's vary between 367 and 383.

* Questions phrased in direction so responses reported are
"True most or All of the time".

urban and Wayne. Over 25% report more than a forty-five minute wait for appointments and this is most common in Wayne (32%) and least on federal reservations (19%). The availability of medical specialists varies widely by strata. Among statewide respondents, 27.2% report availability is never true or not true most of the time, but on reservations 52.8% and in rural areas 38.3% say they lack specialists, compared to 6.6% in urban areas (outside Detroit) and 13.4% in Wayne county.

Most respondents were satisfied with their care and only 7.9% statewide indicated this was never true or not true most of the time. By strata, the most dissatisfied were in the rural area (12%).

About a fourth of the respondents think medical facilities are too far away but for the urban and Wayne resident this is less of a problem. Nearly fourteen percent report transportation problems statewide, but this is more common on the reservation (21.3%) and in Wayne county (16%) or the rural areas (15.3%) than in the urban strata (4.3%).

Very few report they do not know where to go with health questions (7.1%) but the rural resident is slightly more likely to report this problem (9.4%). Slightly over a fourth (26.5%) of the respondents indicated that getting a personal yearly check-up was never true or not true most of the time and this was most common for rural residents, 34.2% of whom do not get yearly check-ups.

About half of the respondents report friends as a source of information about medical sources and the federal reservation resident is most likely to use friends in this way, while the urban resident is least likely.

Nearly a fifth (19.6%) of the respondents indicate being uncomfortable with their current service and in rural areas the proportion is 26.1%. Four statements specifically addressed the racial/cultural fit of patient/professional. Most of the respondents are comfortable with current providers and do not indicate a preference for a Native American health provider. We did not ask the race of providers or medical staff and some may indeed be served by same race professionals. However, a significant percentage said they **would prefer** a Native American provider (31.5% statewide) and if one resides on a federal reservation 41.3%, and in rural areas 33.1%, prefer Indian providers. Only 7.4% say they would see a traditional healer first and this preference is associated with urban living--10.8% of the urban (non-Detroit) and 7.6% of the Wayne county residents find this true all or most of the time. In response to the statement "the provider is not a native and does not understand" 17.4% found this statement true all or most of the time and the urban (non-Detroit) and rural residents were most likely to choose this response with 20.9% and 19.4% respectively.

CHAPTER 10
HEALTH RISK FACTORS
Diet, Exercise, Aids, Alcohol and Smoking

by
Charles Fisher and Elizabeth Chapleski

Before taking a closer look at major health risks and behaviors associated with risk, we begin by examining and defining what we mean by health and well-being. Among the numerous definitions of health is that of the World Health Organization (WHO) "a state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity". This comprehensive definition views health holistically. It also encourages us to consider health in positive terms.

This study, while limited mainly to physical health, does acknowledge the residual and complicating influences of environmental effects, the service environment and individual attitudes on the presence or absence of disease and the health behaviors and risks we take. Conversely, we realize that our relative state of physical health influences other major life areas. All aspects of life are interwoven in truly complex ways. Interwoven in this complex is also the concept of risk and related risk behaviors.

Generally speaking, the years have been accompanied by major advancements and/or improvements in the physical health status of the American people. Overall, dramatic changes have occurred in the patterns of disease with great reductions in life threatening infectious and communicable diseases that were so much a part of our lives not so many years ago. Most naturally occurring deaths today are as a

result of degenerative diseases including heart disease, stroke and cancer. With this in view, it would seem that the outlook for our healthy well-being has probably never been better; such an outlook, however, must consider the effects of risk.

In recent decades we have seen an increased interest in health with more and more interest being paid to health promotion and/or disease prevention. As a result, there are a number of behaviors related to health maintenance that have been identified as important for us to assess and change if necessary. Included among these behaviors are smoking, alcohol/drug abuse, diet, lack of exercise, and nonuse of seat belts.

Numerous studies have identified and confirmed that we as individuals contribute in large measure to our own health. In 1979, the U.S. Department of Health, Education and Welfare, outlined health risks and prevention strategies related to both behavioral excesses (tobacco, alcohol and food) and behavioral deficits (physical inactivity and nonuse of seat belts) that truly represent significant health problems.

Since that time, a number of independent studies have wholly supported the HEW report (Baker, O'Neill & Karph, 1984; Blackburn, 1985; Evans, 1986; and Rankin & Ashley, 1986). Added to that support is the support of a large number of studies that have focused on particular risk factors (some of these will be presented in the course of discussion). There is also a substantial body of literature that discusses risk behaviors in Indian populations.

This group of studies has examined health risk in relation to a wide variety of variables including different classes

of risk (social, psychological, economic), different levels of risk (individual, family, community, societal) different aged populations (infancy through old age), different ethnic populations (including Native Americans), different demographic variables (SES, educational factors, etc.) as well as a variety of situational risks (single parenthood, disabilities, etc.). When all the evidence is gathered, it is very difficult to come away with any conclusion other than that risk is very much a part of our lives in very complex ways.

Thus, there is much evidence that risk behaviors are major contributors to both acute and chronic illnesses. Because of the continuing prevalence and maintenance of risk behaviors, it is evident there are still many people who are either unaware of, or do not believe, the risk attached to the behavioral excesses or behavioral deficits that have been associated with health risk. In any case, habit forming behaviors that are interwoven into our social life and day to day existence, are extremely difficult to change.

PHYSICAL ACTIVITY AND WEIGHT CONTROL

Research supports the fact that regular physical activity is a benefit to both physical and psychological health. A number of recent reviews of literature support the linkage between positive effects and exercise (Leith and Taylor, 1990; Gleser and Mendelberg, 1990; and Plante and Rodin, 1990.) Leith and Taylor (1990) reviewed 81 data-based exercise and activity studies and report positive findings, between 50-80% of the participants reported significant psychological/emotional benefits to participation, with results depending on the design of the study. Gleser and Mendelberg (1990) reviewed the general literature and found that many support the benefits to exercise, both normal and therapeutic, including: anxiety reduction, mood elevation, and increased self-esteem. They go on to relate that activeness may also include additional physical, psychological and social benefits.

Certain diseases, diabetes especially, can be controlled quite nicely with the appropriate combination of diet and exercise. Plante and Rodin (1990) reviewed another set of literature, that focused on nonclinical populations and found that exercise improves mood and psychological well-being as well as enhancing self-concept and self-esteem. It has even been suggested, O'Brian and Vertinsky (1991), that about 50% of aging decline is preventable with participation in regular exercise.

The Michigan Indian data concerning physical activity is shown in Table 43 and shows slightly more than half (52.2%) of the respondents participated in vigorous activities regularly, at least three times per week. This also means that nearly half do not regularly engage in healthy vigorous activities.

TABLE 43: VIGOROUS ACTIVITY PARTICIPATION

	FEDERAL N = 246	URBAN N = 326	RURAL N = 388	WAYNE N = 388	TOTAL N = 1219
AT LEAST 3 TIMES A WEEK	52.4	51.2	47.2	60.6	52.2
1 - 2 TIMES A WEEK	13.8	14.1	18.6	12.0	15.0
1 - 2 TIMES A MONTH	6.9	8.9	8.5	7.3	8.0
LESS THAN ONCE	6.1	7.4	7.2	6.9	7.0
NEVER	20.7	18.4	18.6	13.1	17.8

The picture looks more encouraging when those engaging in less regular (1-2 times per week) vigorous activities are considered, with slightly more than two-thirds of the population either active or relatively active physically. This leaves approximately one-third of the sample at some risk and about half of these severely at risk (those who never engage in vigorous activities).

Overall, approximately one-third of the Native population in Michigan is trying to lose weight with the overall weight loss goal being just over 29 pounds. The results indicate that Native Americans on reservations are less actively pursuing weight loss than are the urban, rural and Wayne county Native populations, these being roughly equal, 35.3%, 34.5%, and 37.1% respectively,. The overall average of these populations was 35.5% as compared to reservation Natives 28.7%.

Reservation Natives also report the most weight to lose, 34.2 pounds. Natives living in rural areas report the next highest mean weight to lose, 30.8 pounds. Combined, rural and reservation Indians report the average weight to lose was 32.1 pounds, compared to the combined results of Wayne

county and other urban Indian residents who report weight to lose on average as 26 pounds. While these differences are not overwhelming, they do suggest 1) the need for an effective culturally oriented weight loss program and 2) that the reservations are perhaps best suited for developing and testing such a program that could eventually benefit the entire population of Michigan Indians who are either trying or have weight to lose.

TABLE 44: TRYING TO LOSE WEIGHT

	FEDERAL N = 247	URBAN N = 326	RURAL N = 388	WAYNE N = 259	TOTAL N = 1220
YES	28.7	35.3	34.5	37.1	34.1
MEAN WEIGHT TO LOSE	34.2	27.0	30.8	26.9	29.1

Weight control is not a simple matter as supported by a number of research findings. Smoller, Wadden and Stunkard (1987) contrast the conflicting findings related to differing responses to dieting that have ranged from improved mood to feelings of deprivation and even depression. Garner and Wooley (1991) point out that dietary and behavioral treatment of obesity are often ineffective. There is evidence that not everyone may be able to lose weight in the same way and that weight fluctuation is as risky if not more risky than maintaining a higher but more stable weight. The literature does indicate that the most successful weight loss programs combine the elements of self-control, exercise, social support, and relapse prevention.

Slightly less than half of the survey respondents indicated that their dietary habits included the monitoring of fat and cholesterol, two of the major contributors to heart disease.

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Conversely, more than half of Michigan's Indians do not watch their fat and/or cholesterol intake and depending on their overall health may be at increased risk for heart disease and stroke.

TABLE 45: WATCH FAT, CHOLESTEROL INTAKE

	FEDERAL N = 246	URBAN N = 324	RURAL N = 386	WAYNE N = 259	TOTAL N = 1215
YES	51.2	46.6	42.7	52.1	47.5

The rural population reported the lowest vigilance in terms of watching fat and cholesterol intake; perhaps this is a function of their relative isolation. While the differences in reporting are not dramatic, they may indicative a need to reach the rural population of Native Americans with more health information.

Special diets are directly related to therapeutic nutrition which might take many forms depending on the condition(s) that need to be addressed by diet. While not always the case, special diets tend to be restrictive and generally carry added risks specific to the health condition they address. Further research on the type of diet might illuminate its relationship to specific illnesses or symptoms.

TABLE 46: SPECIAL DIET

	FEDERAL N = 223	URBAN N = 302	RURAL N = 370	WAYNE N = 247	TOTAL N = 1142
YES	19.7	15.9	14.6	14.6	15.9

Overall, approximately one-seventh, 15.9%, of the population of Native Americans surveyed acknowledged the need and use

of special diets. Although there was not wide variation in the reports from rural, urban, Wayne county, and reservation populations, the reservation population did report the greatest frequency. It is speculated that this may be related to availability of services.

Unfortunately the study did not ask the specific type of diet and it would be helpful to know how many of the reported special diets involved the ADA Diet and were related to the dietary requirements associated with diabetes mellitus, a condition which, in itself, carries substantial risk and where the cooperation of the patient takes on special meaning. Crosstabulations of exercise patterns, needing to lose weight, and being on a special diet were run for those reporting diabetes. The findings were statistically significant in each case with diabetics much less likely to exercise, more likely to report they are tying to lose weight and more likely to be on a special diet. Among those reporting diabetes, 45% say they never exercise, while among those who do not have diabetes only 19.5% never exercise. Among diabetics 61.2% are trying to lose weight, compared to 42.2% of those without diabetes; 63.1% of those who are diabetic are on special diets and 36.9% are not. Those 37% are certainly at greater risk regardless of other methods they may be using to treat their disease.

ATTITUDES ABOUT AIDS

Knowledge

There has been a great proliferation of AIDS education and/or information in recent years in the popular media, in schools, through community efforts, and certainly in the literature. This high exposure is generally reflected in the relatively high totals of study's respondents who reported increased knowledge about AIDS irrespective of whether they lived in reservation, rural or urban areas.

These educational efforts have largely targeted condom use and risky sexual behavior as well as IV drug use practices; also, women and AIDS have been receiving increasing attention (Ickovics and Rodin, 1992) who also note that the primary route of HIV transmission for women involves IVDA but that they are more likely than men to acquire HIV through heterosexual contact. Associated with the current concern for women is an increased concern for pediatric AIDS.

TABLE 47: REPORT CHANGE IN KNOWLEDGE ABOUT AIDS AMONG RESPONDENTS

	FEDERAL N = 75	URBAN N = 88	RURAL N = 116	WAYNE N = 94	TOTAL N = 373
YES	85.3	88.6	88.8	92.6	89.0

Based on their own study, Sheridan, Humfleet and Phair (1990) caution against the decreased perception of risks that was seen to accompany increased knowledge about AIDS.

Behavioral/Attitudinal Change

Compared to increased knowledge about AIDS, there is much more variance reflected in the results of changes in

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behaviors and attitudes about AIDS. The overall total average of 43.2% reflects behavioral and attitudinal changes that resulted from an increased knowledge about AIDS. Results ranged from a low of 36.6% (urban Indians) to a high of 50.9% (rural Indians) who actually reported changes in attitude and behavior due to AIDS risks.

TABLE 48: REPORT CHANGE IN BEHAVIOR & ATTITUDE ABOUT AIDS AMONG
RESPONDENTS

	FEDERAL N = 65	URBAN N = 82	RURAL N = 106	WAYNE N = 92	TOTAL N = 345
YES	40.0	36.6	50.9	42.4	43.2

We do not know the previous attitudes or behavior associated with Aids risk, so it is difficult to determine what proportion in fact is in need of attitudinal or behavioral changes. If one is in a long term monogamous relationship, for instance, behavioral change may not be an issue.

Another explanation may come from Ross and Rosser (1989) who note that information, without a change in attitude, will have no effect on behavior. This view is supported by Fisher and Fisher (1992) who note that AIDS risk reduction is a function that involves more than just information about AIDS transmission and prevention, but also the motivation to reduce AIDS risks as well as the behavioral skills for following through and performing the acts of AIDS risk reduction.

CIGARETTE SMOKING BEHAVIOR

Unless noted otherwise the percentages who smoke or drink alcohol will be for persons aged 18 and over. However, questions about smoking and consumption of alcohol were

asked about all household members aged 10 or above. The numbers of 10 to 17 year olds who engage in these activities is very small and will be reported separately. The statewide percentage of Michigan Indian smokers is 42.1% and the overall mean for the number of cigarettes smoked per day is just over a pack per day (20.66 cigarettes per day) with very little variation across reservation, rural, and Wayne county Native Americans. (See Table 49) Urban Indians outside of Wayne county reported the lowest percentage of smokers (32.1%). Reservation and rural Natives reported smoking at 45.9% and 45.7% respectively and Wayne was slightly lower at 44.1%. Urban differences in poverty, education, home ownership, phone service, etc. shows a higher SES than the other 3 strata and these are associated with smoking. These differences account for the lower smoking percentage in the urban stratum.

TABLE 49: CIGARETTE SMOKING (AGE 18+)

	FEDERAL N = 158	URBAN N = 227	RURAL N = 250	WAYNE N = 199	STATE TOTAL N = 834
YES	45.9	32.1	45.7	44.1	42.1
MEAN CIGARETTES SMOKED/DAY	21.7	21.0	19.8	19.7	20.66

According to the U.S. Department of Health and Human Services, "Cigarette smoking is the single most important preventable cause of death". Smoking has been linked to most lung cancers and is also a major factor in increasing risk for heart disease. There is much support in the literature for these findings by the U.S. Department of Health and Human Services including: Epstein and Perkins (1988) and Berman and Gritz (1991). The literature also indicates that smoking has been linked to back problems:

Jamison, Stetson and Parris (1991) and Heliovaara (1989).

Comparison of Smoking Habits Among Adults (18 Years and Older), U.S. Population and SAIAN 1987.

According to the results of the National Medical Expenditure Survey and the Survey of American Indians and Alaskan Natives, the national percentage of Native Americans aged 18 and over who smoke, 32.8%, is greater than the percentage of smokers of the same age in the U.S. population, 27.1%. Michigan's Native American population smokes at a rate higher than either of these populations, 42.1%. These findings are reflected in Figure 9.

Poverty and Smoking

There is a relationship between poverty and smoking as noted previously. Figure 10 shows that of those 18 and older who are at or below 125% of poverty a significantly higher percentage smoke than would be expected with nearly 44% of those at or below 125% of poverty who smoke, compared to 32.5% of those above 125% of poverty. Thus, economic factors and poverty may contribute to the difference in smoking incidence between the general population and Indians.

Smoking Habits by Age Cohort

There is wide variation in smoking habits when different age groups are considered. Smoking can be seen to begin in adolescence at a rate of about 1 in 5 and grow to nearly 1 in 2 in the early adult years (20-29) and peak at 56.7% in the 30-39 age category. From that point, after a somewhat sharp drop in the 40-49 age group, smoking slowly declines until the 70-79 age cohort where it reaches a low of

FIGURE 9: COMPARISON OF SMOKING HABITS AMONG ADULTS (18 yrs.
AND OLDER): SAIAN '87 AND U.S. POPULATION (NMES '87) AND
MICHIGAN HEALTH PROFILE
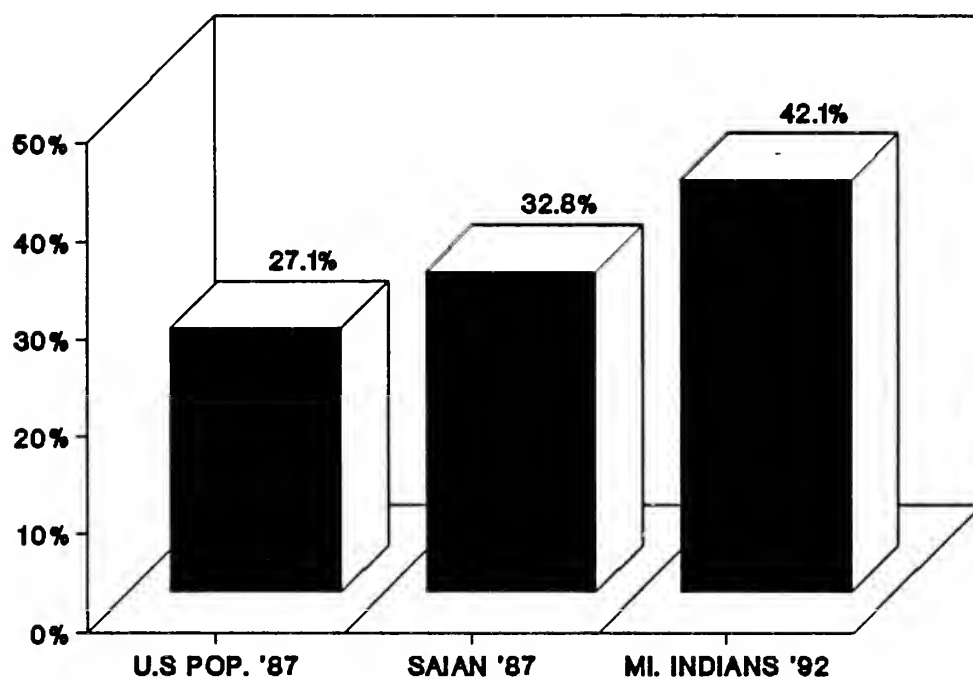
FIGURE 10: PERCENT AT OR BELOW 125% OF POVERTY WHO SMOKE
(AGE 18yrs. AND OLDER)
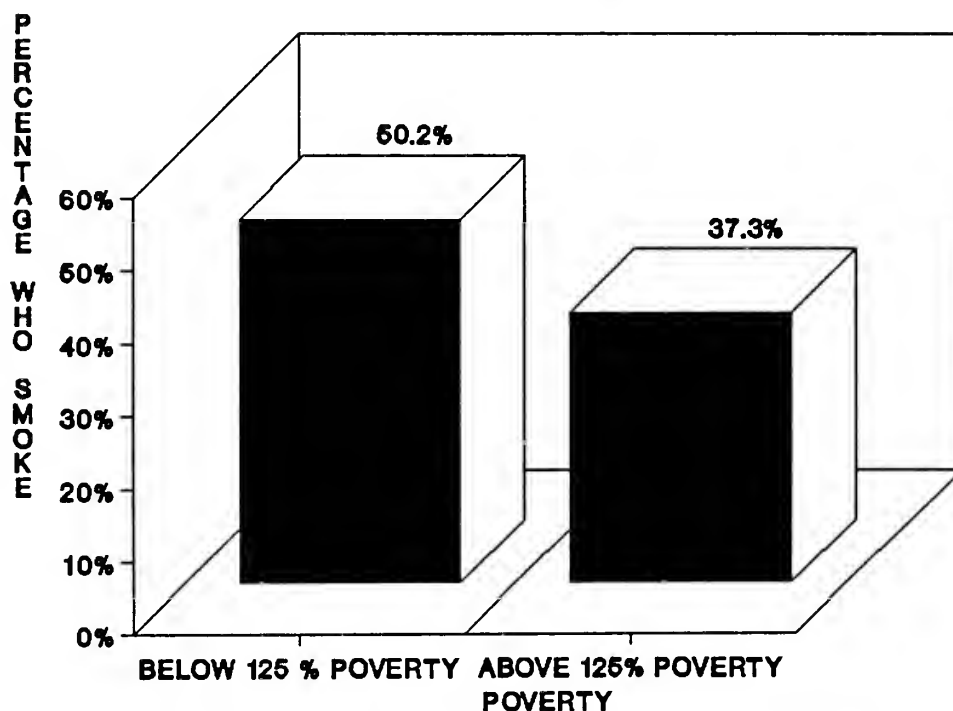
Chi-square is significant at 0.0007 level or less.

FIGURE 11: SMOKING HABITS AMONG MICHIGAN INDIANS BY AGE COHORT
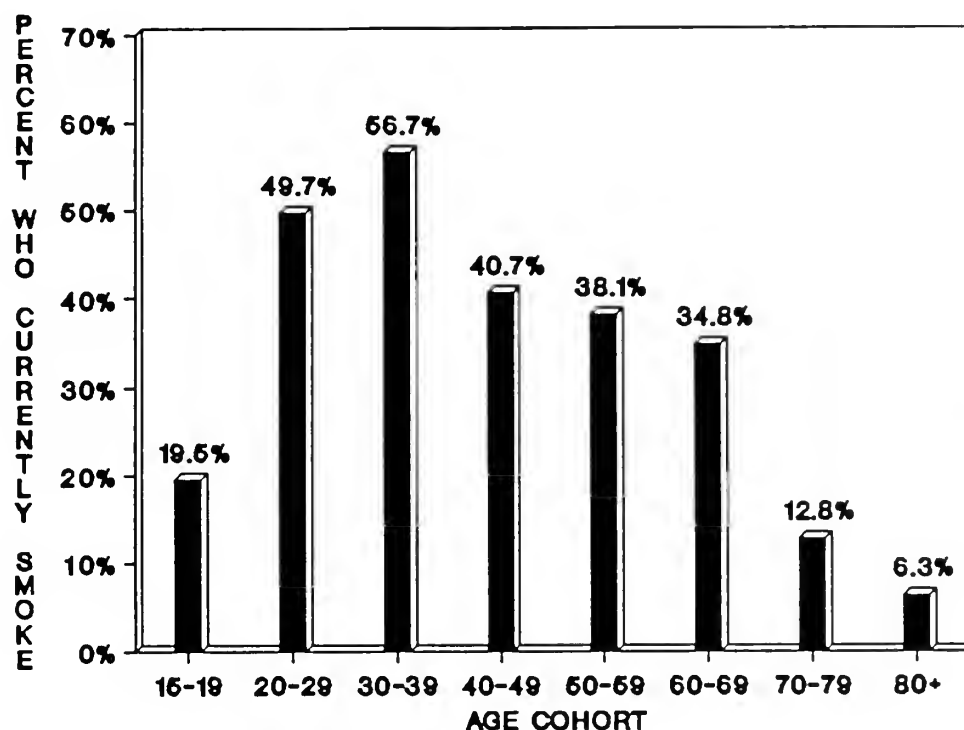
approximately 1 in 8. These variations are illustrated in
Figure 11.

Miller and Slap (1989) were alert to the fact that cigarette
smoking among the young is an important health problem.
They report a decline in adolescent cigarette smoking
between the years of 1976 and 1984 which has now appeared to
plateau with the rate at 8% of high school seniors who smoke
daily. About 9% of those between ages 10 and 17 in our
survey are reported to smoke. These data appear to support
the reduction in smoking among younger cohorts of Michigan
Indians.

Oei and Fea (1987) note that for younger children, parent
implemented smoking reduction programs may be the most
effective. Literature about smoking relapse has made its

way into discussions of adult smokers: Bringham, Henningfield and Stitzer, 1990, emphasize the serious health consequences of smoking and see lapse and relapse as part of the cessation process.

ALCOHOL CONSUMPTION PATTERNS

Proportion Reporting Alcohol Use

The overall percentage of Michigan Native Americans aged 18 and older who are reported to drink alcohol is 50.5% according to the results of our study. Thus 49.5% do not drink, a higher proportion than among whites where Cahalan found 68% drank, though only 6% were classified as "heavy drinkers" using Cahalan's scheme. It seems that Indian drinking patterns differ from white drinking--fewer drink but among those who do there is more heavy drinking. There appears to be no significant difference between the rural, reservation and urban Indian populations (51.8%, 51.6%, and 52.2% respectively), and Wayne County reports fewer who drink (46.1%) . (See Table 50)

Quantity and Frequency

The overall average for frequency, measured by number of times per month the respondents engaged in drinking, was 6.07 with considerable differences in rates expressed by the different populations of Indians. The overall mean for the number of drinks per occasion was 5.01, again with a fair amount of deviation from this mean in reservation, rural and urban areas. (See Table 50)

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	FEDERAL N = 158	URBAN N = 227	RURAL N = 250	WAYNE N = 199	STATE TOTAL N = 834
YES	51.6	52.2	51.8	46.1	50.5
MEAN NUMBER OF TIMES/MONTH	6.7	4.9	5.5	8.1	6.07
MEAN DRINKS PER TIME	6.7	3.7	4.9	5.7	5.01

The information presented in Table 51 further breaks down the frequency of drinking by Michigan Native Americans in terms of the number of times per month. The greatest variance seen in the table is in the differences in the percentage of those who have not had any drinks in the past month in rural, reservation, Wayne county and other urban settings; this ranges from 1.2% (Wayne county) to 11.5% (other urban areas). The urban (non-Detroit) drinking patterns show the same relationship between socioeconomic status and drinking that is seen in other populations. That is, the greater likelihood for those with higher education, who are employed, and have higher income to report that they drink, and the tendency toward lower frequency and quantities consumed, i.e., moderation, for those who do drink.

TABLE 51: FREQUENCY OF DRINKING ALCOHOL/MONTH (AGE 18+)

FREQUENCY OF DRINKING/MONTH	FEDERAL N = 79	URBAN N = 122	RURAL N = 123	WAYNE N = 84	TOTAL N = 408
NONE	5.1	11.5	8.1	1.2	7.1
1-2 TIMES	26.6	34.4	32.5	34.5	32.4
3-6 TIMES	40.5	35.2	36.6	32.1	36.0
7+ TIMES	27.8	18.9	22.8	32.1	24.5

In terms of the quantity of alcohol consumed on drinking occasions, the urban population reports the largest percentage of light drinkers (1-2 drinks) (52.4%), compared to Wayne and rural with 32.9% each and reservation 19.2% who drink one or two drinks per occasion. The heaviest drinking is reported by the federal reservation and rural residents with 61.6% and 49.5% respectively consuming five or more drinks per occasion.

TABLE 52: QUANTITY OF ALCOHOL CONSUMED ON A SINGLE OCCASION

QUANTITY CONSUMED/TIME	FEDERAL N = 73	URBAN N = 105	RURAL N = 111	WAYNE N = 79	TOTAL N = 368
NONE	0.0	0.0	0.0	1.3	0.3
1-2 DRINKS	19.2	52.4	27.9	32.9	34.2
3-4 DRINKS	19.2	28.6	22.5	31.6	25.5
5+ DRINKS	61.6	19.0	49.5	34.2	39.9

There are a wide variety of risks that can be linked to alcohol abuse. Parrish, Higuchi and Dufor (1991) emphasize the association between alcohol consumption and cirrhosis of the liver and conclude that daily consumption (versus binge drinking), amount consumed, length of duration of abuse and being female are the major factors related to risk for cirrhosis. The liver problems reported for Michigan Indians are very low (1.2% overall), but among males 30 and over the proportions increase to over 3%. These data suggest some binge drinking but an additional question concerning variability is needed to understand this more fully.

While alcohol use is associated with a number of major illnesses and diseases, it is especially contraindicated for diabetics and those with arthritis, two of the major problems noted in the Michigan Indian population. However, these diseases are highly associated with age and alcohol

use decreases considerably with age. Perhaps the interaction between age, alcohol use and disease may be a major cause of morbidity in older age groups, and mortality in younger.

Alcohol Use By Age Cohort

Figure 12 essentially contains two sets of information: 1) a description of alcohol use by age cohorts and 2) frequent drinkers by age cohort. Drinking in this population rapidly rises to its highest percentage, 63.8% between the ages of 20-29. The next age group, 30-39, shows only a modest decline in drinking, to 62.4%. The subsequent age categories show a more a rapid and steady decline in the percentages of the population who drink alcohol through the over 80 age group where the percentage of the population who use alcohol at all reaches its lowest, 12.5%. Of those between ages 10 and 17, 3.8% are reported to drink alcohol (not shown).

The drinking habits of frequent drinkers is much more steady across all age cohorts, with the exception of the young and those of advanced age. Among the 15 to 19 age group only 3.5% are frequent drinkers and among the 70-79 age group and the 80 and over categories there are no frequent drinkers. This is likely the result of the fact that frequent drinkers don't make it to these ages.

Liquor Index by Strata

Other research on drinking patterns reports various classification schemes (Weisner, et al, 1984; Weibel-Orlando, 1985; Cahalan, et al, 1969). Most use some

FIGURE 12: ALCOHOL USE AMONG MICHIGAN INDIANS BY AGE COHORT
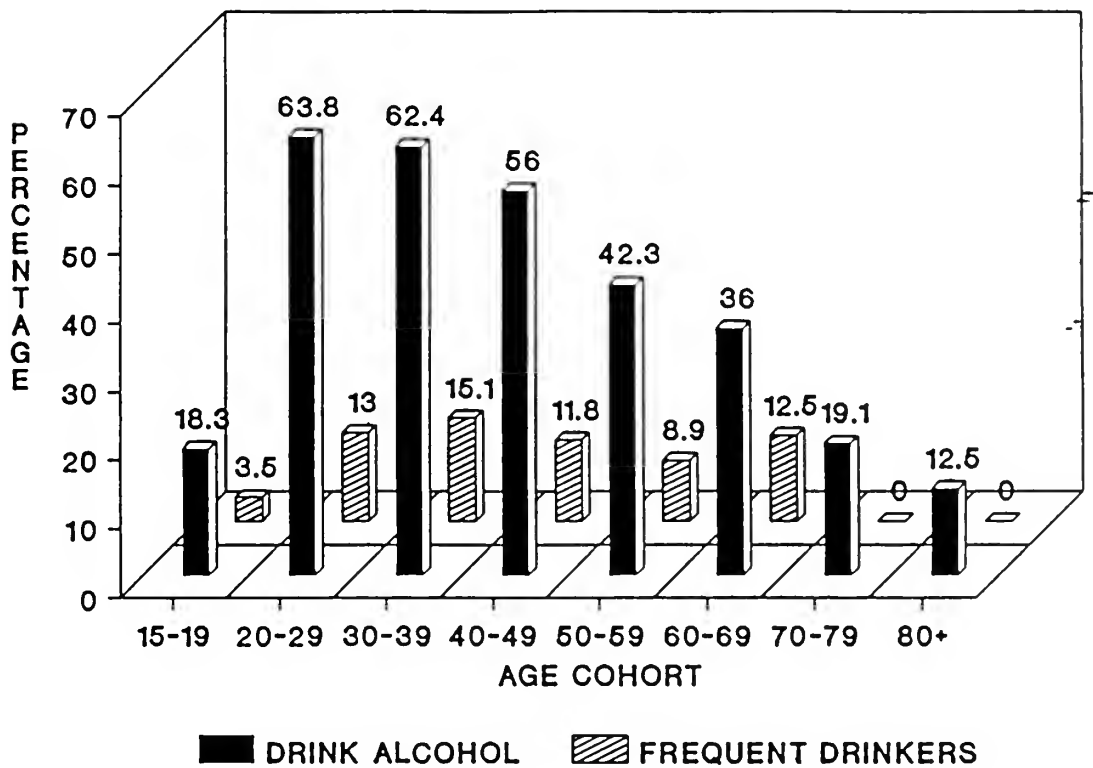
combination of frequency and quantity; some recommend adding variability to determine binge type drinking. This questionnaire did not include variability.

Therefore, the liquor index was created by combining the total quantity and frequency of drinking. Quantity was scaled from zero to 3, with one or two drinks coded 1, three or four coded 2 and five or more coded 3. Frequency was coded zero for none, 1 for one or two drinking occasions during the past month, 2 for those drinking between three and six times, and 3 for seven or more times. Thus the index ranges from zero to six.

Oneway analysis of variance (ANOVA) were performed to compute contrasts and multiple comparison tests between liquor consumption and a number of factors, such as age,

sex, race, strata, education, marital status, proximity to reservation, employment status, poverty and source of income. ANOVA tests the hypothesis that the group means on the alcohol index are equal. In other words we test to see if the average score on the liquor index is the same, for example, for males and females.

Table 53 shows the results of the ANOVA tests. The mean liquor index (range=0 to 6) for the entire sample, age 18 and older is 3.95. The factors that are statistically significantly different are shown with an asterisk. Age and sex vary significantly with males drinking more than females and those between the ages 20 and 29 being the heaviest drinkers. These findings are similar to the Cahalan study of the general population. Also similar are the findings on marital status with single, divorced or separated persons more likely than those who are married or widowed to be heavy drinkers. There are slight differences between the non-Natives and Natives but it is not statistically different. Strata and proximity to reservations do vary significantly with those on a federal reservation reporting heavier drinking, followed by the rural residents and those within 30 miles of a reservation. Higher education seems to reduce drinking with college graduates (mean=3.35) having lower scores than those with less than a high school degree (mean=4.03). The unemployed drink heavier than the employed and the "not working" (homemaker, student, retired) but the difference is not statistically significant. Poverty and income source do vary significantly with those at or below 125% of poverty, as well as those on disability income reporting heavier drinking patterns.

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TABLE 53: ANALYSIS OF VARIANCE OF LIQUOR INDEX BY SELECTED DEMOGRAPHIC CHARACTERISTICS

CATEGORY		MEAN
TOTAL SAMPLE (N = 363)		3.95
AGE *	15 - 19	3.88
	20 - 29	4.28
	30 - 39	4.13
	40 - 49	3.77
	50 - 59	3.58
	60+	3.65
RACE	NATIVE AMERICAN	4.0
	NON-NATIVE AMERICAN	3.86
SEX *	MALE	4.23
	FEMALE	3.67
STRATA *	FEDERAL	4.44
	URBAN	3.50
	RURAL	4.12
	WAYNE	3.89
EDUCATION*	LESS THAN HIGH SCHOOL	4.03
	HIGH SCHOOL GRADUATE	4.0
	COLLEGE GRADUATE	3.35
MARITAL STATUS*	NEVER MARRIED	4.32
	MARRIED	3.69
	SEPARATED	5.0
	DIVORCED	4.02
	WIDOWED	3.75
PROXIMITY TO RESERVATION*	ON RESERVATION/MEMBER	4.66
	ON RESERVATION/NOT MEMBER	4.14
	NEAR $\leq$ 30 MILES	4.06
	> 30 MILES	3.83

(TABLE 53 CONTINUED)

CATEGORY		MEAN
EMPLOYMENT	EMPLOYED	3.93
	UNEMPLOYED	4.17
	NOT WORKING	3.87
POVERTY*	100% POVERTY	4.14
	100 - 125% POVERTY	4.36
	ABOVE 125% POVERTY	3.83
INCOME SOURCE*	DISABILITY INCOME	5.0
	NO INVESTMENT INCOME	4.05
	WITH INVESTMENT INCOME	3.58

* Statistically significant at $\leq$ 0.05 level

Michigan Indian drinking patterns show similarities as well as differences from the U.S. as a whole, where drinking is a more typical behavior and abstinence and heavy drinking more atypical. Native American drinking appears to be more bi-modal with about half the adult population drinkers and half abstainers. Thus, there are more Michigan Indians who abstain, but heavy drinking is more common. This may have more to do with socio-economic factors and environmental influences than race. Young Native American males are much more likely to be poor, unemployed and have less education than young white males. This may also reflect the social influence of location on the more rural, isolated and those on or near reservations. Alcohol prevention and abuse programs may be best targeted to these areas.

CONCLUSION

The relationship between risk behaviors and health outcomes
is well documented. Many of the health behaviors discussed
in this section, i. e., exercise, smoking, dietary habits,
have been linked to chronic diseases and especially to heart
disease (Nestle and Cowell, 1990). The risk related to
smoking, nutrition, excessive weight, alcohol have also been
linked to cancer in a variety of sites (Wagner, 1989) and to
diabetes and its complications (Coram and Mangun, 1986).

Prevention programs that include education, counseling and
self-care are recommended. In terms of health, particularly
over the long term, it is very important that we influence
our own health as well as the health of others. It is
equally important that we take the steps necessary to help
assure our health as individuals and as a people.

CHAPTER 11

PERCEIVED SOCIAL PROBLEMS IN THE COMMUNITY

This set of questions was asked of the respondent only. Questions about attitudes and opinions cannot be accurately assessed by a surrogate or informant.

Perceptions of local problems were assessed by asking how serious each of a list of eighteen items is in the respondent's community. Three response options were offered: a serious problem, somewhat a problem and not a problem. Table 54 shows the responses to all items, arranged in rank order by the percent statewide who rate the problem as serious. Infectious diseases (other than Aids) was viewed as serious by 71.6% statewide and the percentage was higher in the urban and Wayne strata--79.4% and 78.7% respectively. The second most frequently mentioned "serious problem" was Aids (55.6%), followed by sexual abuse of children (49.8%), domestic violence (47.4%), truancy (45.1%), care of the elderly (44.4%), depression (39.1%), crime and safety (37.2%), out of control children (34.5%), racism and prejudice (34.1%), teen pregnancy (26.8%), teen alcoholism (26.7%), adult drug abuse (26.4%), adult alcoholism (24.9%), maintaining the native culture (23.9%), reckless driving (23.1%), teen drug abuse (23%), and unemployment (18.8%).

TABLE 54: PERCEIVED SOCIAL PROBLEMS

		FEDERAL N = 37	URBAN N = 68	RURAL N = 77	WAYNE N = 61	TOTAL N = 243
OTHER INFECTIOUS DISEASES	SERIOUS PROBLEM	51.4	79.4	68.8	78.7	71.6
	SOMEWHAT A PROBLEM	32.4	10.3	23.4	13.1	18.5
	NOT A PROBLEM	16.2	10.3	7.8	8.2	9.9

	FEDERAL N = 35	URBAN N = 54	RURAL N = 69	WAYNE N = 49	TOTAL N = 207
AIDS SERIOUS PROBLEM	34.3	61.1	53.6	67.3	55.6
SOMEWHAT A PROBLEM	31.4	22.2	26.1	2.0	20.3
NOT A PROBLEM	34.3	16.7	20.3	30.6	24.2

	FEDERAL N = 56	URBAN N = 68	RURAL N = 94	WAYNE N = 71	TOTAL N = 289
SEXUAL ABUSE OF CHILDREN SERIOUS PROBLEM	25.0	70.6	37.2	66.2	49.8
SOMEWHAT A PROBLEM	39.3	16.2	37.2	16.9	27.7
NOT A PROBLEM	35.7	13.2	25.5	16.9	22.5

	FEDERAL N = 66	URBAN N = 82	RURAL N = 99	WAYNE N = 80	TOTAL N = 327
DOMESTIC VIOLENCE SERIOUS PROBLEM	25.8	58.5	35.4	68.8	47.4
SOMEWHAT A PROBLEM	39.4	20.7	31.3	17.5	26.9
NOT A PROBLEM	34.8	20.7	33.3	13.8	25.7

	FEDERAL N = 59	URBAN N = 79	RURAL N = 97	WAYNE N = 71	TOTAL N = 306
TRUANCY SERIOUS PROBLEM	20.3	60.8	37.1	59.2	45.1
SOMEWHAT A PROBLEM	42.4	25.3	36.1	25.4	32.0
NOT A PROBLEM	37.3	13.9	26.8	15.5	22.9

	FEDERAL N = 62	URBAN N = 79	RURAL N = 102	WAYNE N = 79	TOTAL N = 322
ELDERLY CARE SERIOUS PROBLEM	29.0	51.9	36.3	59.5	44.4
SOMEWHAT A PROBLEM	41.9	20.3	34.3	16.5	28.0
NOT A PROBLEM	29.0	27.8	29.4	24.1	27.6

		FEDERAL N = 68	URBAN N = 79	RURAL N = 102	WAYNE N = 77	TOTAL N = 326
TEEN ALCOHOLISM	SERIOUS PROBLEM	8.8	38.0	15.7	45.5	26.7
	SOMEWHAT A PROBLEM	20.6	25.3	30.4	20.8	24.8
	NOT A PROBLEM	70.6	36.7	53.9	33.8	48.5

		FEDERAL N = 60	URBAN N = 79	RURAL N = 107	WAYNE N = 76	TOTAL N = 322
ADULT DRUG ABUSE	SERIOUS PROBLEM	3.3	43.0	16.8	40.8	26.4
	SOMEWHAT A PROBLEM	25.0	27.8	31.8	17.1	26.1
	NOT A PROBLEM	71.7	29.1	51.4	42.1	47.5

		FEDERAL N = 70	URBAN N = 83	RURAL N = 110	WAYNE N = 82	TOTAL N = 345
ADULT ALCOHOLISM	SERIOUS PROBLEM	5.7	42.2	12.7	40.2	24.9
	SOMEWHAT A PROBLEM	21.4	26.5	29.1	28.0	26.7
	NOT A PROBLEM	72.9	31.3	58.2	31.7	48.4

		FEDERAL N = 58	URBAN N = 77	RURAL N = 100	WAYNE N = 79	TOTAL N = 314
MAINTAINING NATIVE CULTURE	SERIOUS PROBLEM	34.5	24.7	16.0	25.3	23.9
	SOMEWHAT A PROBLEM	31.0	42.9	33.0	21.5	32.2
	NOT A PROBLEM	34.5	32.5	51.0	53.2	43.9

		FEDERAL N = 65	URBAN N = 91	RURAL N = 105	WAYNE N = 89	TOTAL N = 350
RECKLESS DRIVING	SERIOUS PROBLEM	9.2	35.2	16.2	29.2	23.1
	SOMEWHAT A PROBLEM	46.2	40.7	49.5	27.0	40.9
	NOT A PROBLEM	44.6	24.2	34.3	43.8	36.0

		FEDERAL N = 50	URBAN N = 78	RURAL N = 92	WAYNE N = 64	TOTAL N = 284
DEPRESSION	SERIOUS PROBLEM	18.0	44.7	77.2	60.9	39.1
	SOMEWHAT A PROBLEM	42.0	35.9	41.3	18.8	34.9
	NOT A PROBLEM	40.0	15.4	31.5	20.3	26.1

		FEDERAL N = 66	URBAN N = 94	RURAL N = 111	WAYNE N = 89	TOTAL N = 360
CRIME, SAFETY	SERIOUS PROBLEM	31.8	39.4	39.6	36.0	37.2
	SOMEWHAT A PROBLEM	47.0	33.0	36.0	27.1	35.3
	NOT A PROBLEM	21.2	27.7	24.3	36.0	27.5

		FEDERAL N = 62	URBAN N = 85	RURAL N = 101	WAYNE N = 82	TOTAL N = 330
OUT OF CONTROL CHILDREN	SERIOUS PROBLEM	8.1	51.8	27.7	45.1	34.5
	SOMEWHAT A PROBLEM	45.2	25.9	38.6	20.7	32.1
	NOT A PROBLEM	46.8	22.4	33.7	34.1	33.3

		FEDERAL N = 65	URBAN N = 91	RURAL N = 113	WAYNE N = 86	TOTAL N = 355
RACISM, PREJUDICE	SERIOUS PROBLEM	27.7	45.1	22.1	43.0	34.1
	SOMEWHAT A PROBLEM	44.6	24.2	50.4	25.6	36.6
	NOT A PROBLEM	27.7	30.8	27.4	31.4	29.3

		FEDERAL N = 66	URBAN N = 80	RURAL N = 104	WAYNE N = 78	TOTAL N = 328
TEEN PREGNANCY	SERIOUS PROBLEM	6.1	38.8	17.3	44.9	26.8
	SOMEWHAT A PROBLEM	36.4	33.8	28.8	17.9	29.0
	NOT A PROBLEM	57.6	27.5	53.8	37.2	44.2

		FEDERAL N = 62	URBAN N = 79	RURAL N = 105	WAYNE N = 72	TOTAL N = 311
TEEN DRUG ABUSE	SERIOUS PROBLEM	4.8	36.7	13.3	37.5	23.0
	SOMEWHAT A PROBLEM	22.6	27.8	33.3	19.4	26.7
	NOT A PROBLEM	72.6	35.4	53.3	43.1	50.3

		FEDERAL N = 69	URBAN N = 92	RURAL N = 112	WAYNE N = 78	TOTAL N = 351
UNEMPLOY- MENT	SERIOUS PROBLEM	11.6	28.3	8.0	29.5	18.8
	SOMEWHAT A PROBLEM	24.6	25.0	18.8	28.2	23.6
	NOT A PROBLEM	63.8	46.7	73.2	42.3	57.5

Figures 13a and 13b picture the comparisons between the state total and the four strata. The pattern noted in these figures which show the top seven items, is uniform throughout the entire set of problems. The urban (non-Detroit) and Wayne strata rate all the social and health problems as serious much more frequently than the rural and federal reservation. The urban environment is clearly associated with social problems. An interesting note of exception to this pattern is seen in the perception of crime and safety which is viewed as equally serious in all strata. The only problem viewed as serious by more residents of the federal reservation than the other strata is the ability to maintain the native culture.

FIGURE 13a: SELECTED SOCIAL PROBLEMS: PERCENT WHO RATE AS
"SERIOUS PROBLEM" BY STRATA

PROBLEMS

AIDS
- 55.6%
- 34.3%
- 61.1%
- 53.6%
- 67.3%

SEXUAL ABUSE(CHILD)
- 49.8%
- 25%
- 70.6%
- 37.2%
- 66.2%

DOMESTIC VIOLENCE
- 47.4%
- 25.8%
- 58.5%
- 35.4%
- 68.8%

0%   20%   40%   60%   80%
PERCENTAGE

■ TOTAL   ▨ FEDERAL   ☐ URBAN
▨ RURAL   ▨ WAYNE
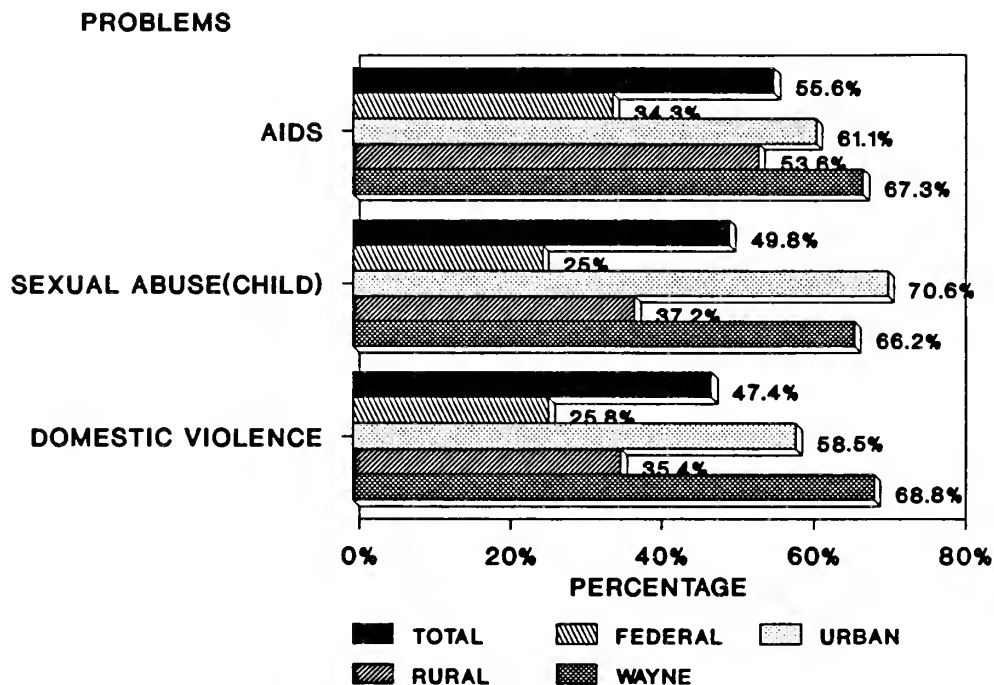
FIGURE 13b: SELECTED SOCIAL PROBLEMS: PERCENT WHO RATE AS
"SERIOUS PROBLEM" BY STRATA

PROBLEMS

TRUANCY
- 45.1%
- 20.3%
- 60.8%
- 37.1%
- 59.2%

ELDERLY CARE
- 44.4%
- 29%
- 51.9%
- 36.3%
- 59.5%

DEPRESSION
- 39.1%
- 18%
- 48.7%
- 27.2%
- 60.9%

0%   10%   20%   30%   40%   50%   60%   70%
PERCENTAGE

■ TOTAL   ▨ FEDERAL   ☐ URBAN
▨ RURAL   ▨ WAYNE
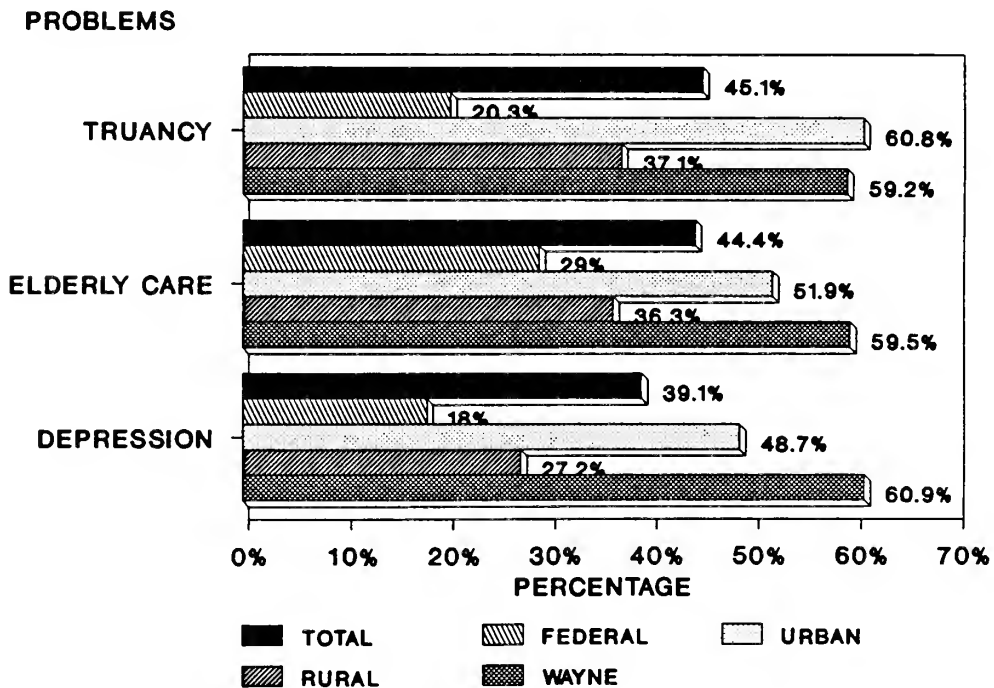
INTERVIEWER ASSESSMENT

Following the interviews, which took place in respondent homes for the most part, interviewers assessed the fatigue, and cooperation of respondents, the need for a number of types of service including physical and mental health, transportation, social support, help with activities of daily living, and economic resources. An additional set of questions assessed the conditions of the respondents' housing. (Table 55) Interviewer assessments have been found to correspond highly with respondent assessments of their own need (Chapleski, 1990). If there is bias in any direction it is usually that respondents themselves will assess their situations as less serious than will an outside observer.

Respondents were rated as very cooperative 90% of the time. Only 3% were rated not at all cooperative. The interview was viewed as not fatiguing with only 1.9% rating it very fatiguing and 80 % rating it not at all fatiguing. Interviewers assessed 93% of the respondents as not at all disoriented and 3.8% as very disoriented, most of whom were in the federal and rural strata.

The two areas of need ranked most frequently as "very needy" were economic resources (10.6% statewide) and physical health care (9.1% statewide). All situations were ranked as "very needy" by a larger percentage in the rural strata with physical health (15.2%), transportation (14.3%), economic resources (23.4%) a much more serious problem for rural residents. Federal reservation residents were viewed as very needy in terms of physical health care needs (12%) slightly less than rural (15.2%) but three times as often as

TABLE 55: INTERVIEWER ASSESSMENT

ASSESSMENT		FEDERAL	URBAN	RURAL	WAYNE	TOTAL
FATIGUE	VERY MUCH	0.0	2.4	3.2	1.3	1.9
	SOMEWHAT	21.7	18.8	11.8	23.7	18.5
	NOT AT ALL	78.3	78.8	84.9	75.0	79.6
DISORIEN-TATION	VERY MUCH	10.1	0.0	3.7	2.4	3.8
	SOMEWHAT	2.9	2.3	1.9	6.0	3.2
	NOT AT ALL	87.0	97.7	94.4	91.6	93.0
COOPERA-TION	VERY MUCH	89.7	83.0	90.2	94.7	89.5
	SOMEWHAT	2.9	15.9	7.1	2.1	7.2
	NOT AT ALL	7.4	1.1	2.7	3.2	3.3
PHYSICAL HEALTH CARE NEED	NO NEED	28.0	45.7	29.5	58.5	40.5
	NOT VERY NEEDY	34.7	29.3	23.2	22.3	26.8
	SOMEWHAT NEEDY	25.3	20.7	32.1	14.9	23.6
	VERY NEEDY	*12.0*	*4.3*	*15.2*	*4.3*	*9.1*
MENTAL HEALTH CARE NEED	NO NEED	69.3	63.0	52.3	85.6	66.6
	NOT VERY NEEDY	18.7	20.7	25.2	10.0	19.0
	SOMEWHAT NEEDY	12.0	12.0	17.1	4.4	11.7
	VERY NEEDY	*0.0*	*4.3*	*5.4*	*0.0*	*2.7*
TRANSPOR-TATION NEED	NO NEED	68.0	77.2	42.9	75.5	64.6
	NOT VERY NEEDY	13.3	10.9	15.2	4.3	11.0
	SOMEWHAT NEEDY	13.3	6.5	27.7	8.5	14.7
	VERY NEEDY	*5.3*	*5.4*	*14.3*	*11.7*	*9.7*
SOCIAL SUPPORT NEED	NO NEED	57.3	56.5	37.2	71.3	54.5
	NOT VERY NEEDY	24.0	27.2	31.9	12.8	24.3
	SOMEWHAT NEEDY	16.0	13.0	23.0	11.7	16.3
	VERY NEEDY	*2.7*	*3.3*	*8.0*	*4.3*	*4.8*

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ASSESSMENT		FEDERAL	URBAN	RURAL	WAYNE	TOTAL
ADL NEEDS	NO NEED	79.7	78.3	66.4	75.5	74.3
	NOT VERY NEEDY	10.8	12.0	17.7	13.8	13.9
	SOMEWHAT NEEDY	5.4	8.7	11.5	7.4	8.6
	VERY NEEDY	*4.1*	*1.1*	*4.4*	*3.3*	*3.3*
ECONOMIC RESOURCE NEED	NO NEED	40.8	50.5	36.0	58.5	46.3
	NOT VERY NEEDY	39.4	24.2	11.7	11.7	20.2
	SOMEWHAT NEEDY	18.3	17.6	28.8	24.5	22.9
	VERY NEEDY	*1.4*	*7.7*	*23.4*	*5.3*	*10.6*

ASSESSMENT		FEDERAL	URBAN	RURAL	WAYNE	TOTAL
NEED HOME REPAIRS	YES	32.1	18.2	32.3	23.5	26.4
	NO	67.9	81.8	67.7	76.5	73.6
PLUMBING PROBLEMS	YES	7.7	1.3	13.7	1.2	6.1
	NO	92.3	98.7	86.3	98.8	93.9
HEATING PROBLEMS	YES	15.4	10.3	12.8	4.7	10.4
	NO	84.6	89.7	87.2	95.3	89.6
HOUSING STRUCTURE PROBLEMS	YES	28.3	9.0	14.7	11.8	14.8
	NO	71.7	91.0	85.3	88.2	85.2
NEEDS BARS, RAMPS	YES	11.5	2.6	2.1	2.4	3.9
	NO	88.5	97.4	97.9	97.6	96.1
OVERALL HOUSING CONDITIONS	VERY POOR	0.0	2.6	1.0	0.0	0.9
	POOR	9.1	3.8	15.2	3.2	8.0
	AVERAGE	40.0	17.9	38.4	35.5	32.9
	GOOD	20.0	28.2	23.2	21.5	23.4
	VERY GOOD	30.9	47.4	22.2	39.8	34.8

either urban or Wayne residents (4.3% each). Wayne county Indians were perceived as having "no need" on any of the items much more frequently than the other strata.

Housing problems have been found to be more serious for Michigan Indians than other groups. Over a fourth of the homes were viewed as needing repairs and in the rural and federal strata over 32%. Only 6% reported plumbing problems, again the problem is more serious for the 13.7% in rural and 7.7% in federal reservation areas who are perceived to have plumbing problems. Heating problems, structural problems and overall housing conditions show the same pattern by strata. Over ten percent statewide report heating problems, but 13% of rural and 15% of federal reservation residents are reported to have this problem. Structural problems are experienced by 15% statewide, but 28% on federal reservations. While 3.9% of all residents live in homes where bars or ramps are needed, 11.5% of reservation homes need these assistive devices. Housing conditions are rated best for urban residents with about 75% living in housing rated as good or very good, compared to 60% in Wayne, 51% in federal reservation, and 46% in rural areas.

SUMMARY AND RECOMMENDATIONS

This report has presented a snapshot of health, social, financial, housing, and transportation needs of Michigan Indians of all ages, living in four distinct geographical regions--on or near (within 30 miles) federal reservations, rural non-reservation, Wayne county (Detroit), and other Urban centers around the state. We have presented findings for the state total as well as the four strata. Some of the data were broken down by age and sex. While the findings illuminate the conditions and problems of Michigan's American Indian families in a general sense, this rich dataset has the potential for much further study of subgroups within the sample.

These data show similarities to data collected about other American Indian populations in terms of incidence of selected diseases and environmental conditions. Michigan's Indians are more prone to diabetes, emphysema, and arthritis than the U.S. population in general. They are also more likely to report their health as fair or poor and less likely to have private insurance to pay for their health care. While their health is more tenuous than the general population, their resources to prevent health problems are extremely limited. Unemployment is excessive in this population and poverty is evident in both the marginally employed as well as the unemployed. Many families suffer housing or neighborhood problems

Recent studies of Michigan's health risk behaviors show that Michiganders smoke and drink alcohol more than persons in the majority of other states; they are also more likely to

be overweight and exercise less. Thus the health risk behavior of Michigan's Indian population does not appear to be significantly different from the general population in our state. Therefore, while the Native American population is being targeted in this report, it seems appropriate to recommend to our state and local health departments, to continue to seek health promotion and prevention programs acceptable to Michigan residents in general, as well as specifically targeted toward subpopulations.

Differences exist between males and females and within age groups in specific chronic diseases or illnesses. Males report more heart disease, cancer, hearing loss, emphysema, and cancer while females report more vision problems, arthritis, allergies, high blood pressure, back problems, cholesterol problems, diabetes, thyroid and kidney problems. The only conditions that do not increase significantly with age are allergies, asthma, emotional problems, thyroid, kidney or liver problems, tuberculosis, hepatitis and fetal alcohol syndrome. Preventive and treatment programs must take these sex, age differentials in mind.

Diabetes is more prevalent in both the SAIAN and the Michigan Indian population than the U.S. population and the differences are more than twofold. Age and sex are especially associated with diabetes. Age 40 appears to be where the increase begins. The incidence for females is much higher than for males, which is also consistent with national data. Education and counseling programs for treatment and prevention of adult onset diabetes is recommended for young and middle-aged adults as they approach the age of greater risk.

These figures may represent the "tip of the iceberg". In studies of self reports, followed by actual clinical

screenings, the percentage of American Indians with disease rose considerably, sometimes by half.

There is a sizeable proportion who have need of health aids and the need for multiple aids is associated with poverty. Hearing aids, glasses and dentures are needs of many. Being at or near poverty makes it difficult to afford many of these health aids or devices that are not reimbursable by third-party insurers such as medicaid or medicare.

This report has shown that while Michigan Indians have the highest poverty rate among minorities and the most serious health problems, they exhibit many strengths. As stated earlier in this report, solutions arise from looking at strengths as well as problems. The resurgence of traditional beliefs and practices, including respect for their elders, "wellness" and being in harmony with the environment, has real potential to change behaviors that will improve health. By integrating medical model service delivery practices with more traditional belief systems real progress may be possible.

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APPENDIX A

SAMPLING FRAMES AND FORMULAS BY STRATA

A-1 FEDERALLY RECOGNIZED TRIBE STRATA

A-2 RURAL OFF-RESERVATION STRATA

A-3 URBAN OFF-RESERVATION STRATA

A-4 WAYNE COUNTY OFF-RESERVATION STRATA

TABLE A-1

SAMPLING FRAME
FEDERALLY RECOGNIZED TRIBE STRATA

TRIBE	ESTIMATED NUMBER OF HOUSEHOLDS*	NUMBER SAMPLED	NUMBER IW's NEEDED	NUMBER IW'S COMPLETED
BAY MILLS CHIPPEWA	352	12	8	11
GRAND TRAVERSE BAND	631	20	14	2
HANNAHVILLE	162	6	4	0
KEWEENAW BAY	743	23	16	5
LAC VIEUX DESERT	96	4	3	1
SAGINAW CHIPPEWAS	497	16	11	11
SAULT Ste. MARIE CHIPPEWAS	2948	95	65	30
MISSING/OTHER	-	-	-	16
TOTAL	5449	176⁻	121	76

* Based on 1990 census.

⁻ Formula needed to determine sample size :

$$\frac{\text{Number needed}}{\substack{\text{Response} \times \text{Eligibility} \times \text{Occupancy} \\ \text{Rate} \qquad \text{Rate} \qquad \text{Rate 1} \\ \text{Non-interview}}} = \frac{120}{0.80 \times 0.95 \times 0.90} = 175$$

TABLE A-2

SAMPLING FRAME
RURAL NON-RESERVATION STRATA

COMMUNITY NAME	COUNTY	ESTIMATED NUMBER OF HOUSEHOLDS*	^NUMBER SAMPLED	NUMBER IW's NEEDED	^NUMBER IW's COMPLETED
MICADO	ALCONA	21	N.A	2	N.A
BRADLEY	BARRY	72	N.A	3	N.A
KEWADIN	ANTRIM	81	N.A	4	N.A
ALLEGAN	ALLEGAN	209	N.A	10	N.A
CHEBOYGAN	CHEBOYGAN	184	N.A	9	N.A
FULTON	KALAMAZOO	391	N.A	18	N.A
CROSS VILLAGE	EMMET	262	N.A	12	N.A
MUSKEGON	MUSKEGON	515	N.A	24	N.A
CHARLEVOIX	CHARLEVOIX	145	N.A	7	N.A
CASS	CASS	180	N.A	8	N.A
BERRIEN	BERRIEN	263	N.A	12	N.A
VAN BUREN	VAN BUREN	248	N.A	11	N.A
TOTAL		2571	190"	120	117

* Based on 1990 census.

" Formula needed to determine sample size :

$$\frac{\text{Number needed}}{\substack{\text{Response} \times \text{Eligibility} \times \text{Occupancy} \\ \text{Rate} \qquad\quad \text{Rate} \qquad\quad \text{Rate 1} \\ \text{Non-interview}}} = \frac{120}{0.80 \times 0.95 \times 0.85} = 186$$

^ Sample was drawn randomly from entire Rural Frame, not stratified by specific community. Thus, individual results were not coded by community.

TABLE A-3

SAMPLING FRAME
URBAN AMERICAN INDIAN STRATA

CITY	COUNTY	ESTIMATED NUMBER OF HOUSEHOLDS*	NUMBER SAMPLED	NUMBER IW's NEEDED	NUMBER IW's COMPLETED
BAY CITY	BAY	279	9	5	7
SAGINAW	SAGINAW	351	11	6	5⁻
LANSING	INGHAM	746	25	14	8
GRAND RAPIDS	KENT	1060	35	20	1
FLINT	GENESEE	1205	39	22	13
PONTIAC	OAKLAND	1518	49	28	40
WARREN	MACOMB	1015	33	19	5
BATTLE CREEK	CALHOUN	267	9	5	6
OTHER		-	-	-	11
TOTAL		6441	239⁻	119	96

* Based on 1990 census.

⁻ Formula needed to determine sample size :

$$\frac{\text{Number needed}}{\substack{\text{Response} \times \text{Eligibility} \times \text{Occupancy} \\ \text{Rate} \quad\quad \text{Rate} \quad\quad \text{Rate 1} \\ \text{Non-interview}}} = \frac{120}{0.70 \times 0.85 \times 0.85} = 237$$

TABLE A-4

SAMPLING FRAME
WAYNE COUNTY STRATA

ESTIMATED NUMBER OF HOUSEHOLDS*	NUMBER SAMPLED	NUMBER OF IW's NEEDED	NUMBER OF IW's COMPLETED
3095	262**	120	94

* Based on 1990 census.

** Formula needed to determine sample size :

$$\frac{\text{Number needed}}{\substack{\text{Response} \times \text{Eligibility} \times \text{Occupancy} \\ \text{Rate} \qquad \text{Rate} \qquad \text{Rate 1} \\ \text{Non-interview}}} = \frac{120}{0.70 \times 0.85 \times 0.77} = 262$$

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APPENDIX B

1990 CENSUS DATA - TABLES AND MAPS

B-1 U.S. AMERICAN INDIANS/ALASKA NATIVES AND U.S. RESIDENTS, ALL RACES AGE DISTRIBUTION

B-2 MICHIGAN INDIANS AND MICHIGAN ALL RACE AGE DISTRIBUTION

B-3 AMERICAN INDIANS, WAYNE COUNTY AND WAYNE ALL RACE AGE DISTRIBUTION

B-4 POPULATION MICHIGAN INDIANS BY COUNTY

B-5 MAP - PERCENT MICHIGAN INDIAN POPULATION BY COUNTY

B-6 - MICHIGAN INDIAN POPULATION BY COUNTY

B-7 - MAP OF U.S. AMERICAN INDIAN POPULATION IN THOUSANDS

B-8 - AMERICAN INDIAN POPULATION, RANK ORDER OF STATES IN U.S.

B-9 AMERICAN INDIANS POPULATION BY AREA AND STATE

U.S. AMERICAN INDIANS/ALASKA NATIVES AND U.S. RESIDENTS, ALL RACES

AGE DISTRIBUTION:
NUMBER AND PERCENT

AGE GROUP	U.S. AMERICAN INDIANS/ ALASKA NATIVES		U.S., ALL RACES	
	NUMBER	PERCENT	NUMBER	PERCENT
All ages	1,303,193	100.00	226,504,825	100.00
Under 5 years	140,111	10.75	16,334,407	7.22
5 - 9 years	136,898	10.51	16,697,407	7.37
10 - 14 years	145,673	11.18	18,240,919	8.05
15 - 19 years	157,612	12.09	21,161,667	9.34
20 - 20 years	135,587	10.40	21,312,557	9.41
25 - 29 years	113,271	8.69	19,517,672	8.62
30 - 34 years	96,621	7.14	17,557,957	7.75
35 - 39 years	75,710	5.81	13,693,008	6.17
40 - 44 years	62,363	4.79	11,668,239	5.15
45 - 49 years	52,496	4.03	11,088,383	4.90
50 - 54 years	46,654	3.58	11,708,984	5.17
55 - 59 years	40,604	3.12	11,614,054	5.13
60 - 64 years	30,928	2.37	10,085,711	4.45
65 - 69 years	25,981	1.99	8,780,844	3.88
70 - 74 years	18,204	1.40	6,796,742	3.00
75 - 79 years	12,577	0.97	4,792,597	2.11
80 - 84 years	6,427	0.49	2,934,229	1.30
85 years & older	5,385	0.43	2,239,721	0.99

MDN=22.6   MDN=30.0

Notes: Based on 1990 U.S. Census data.
Percentages may not sum to totals due to rounding.

MICHIGAN INDIANS AND MICHIGAN RESIDENTS

AGE DISTRIBUTION:
NUMBER AND PERCENT

AGE GROUP	MICHIGAN INDIANS		MICHIGAN, ALL RACES	
	NUMBER	PERCENT	NUMBER	PERCENT
All ages	55,638	100.00	9,295,297	100.00
Under 5 years	5,016	9.02	702,554	7.56
5 - 9 years	5,331	9.58	692,247	7.45
10 - 14 years	5,419	9.74	666,370	7.17
15 - 19 years	5,503	9.89	696,803	7.50
20 - 20 years	4,960	8.91	705,318	7.59
25 - 29 years	4,969	8.93	764,262	8.22
30 - 34 years	4,960	8.91	810,291	8.72
35 - 39 years	4,467	8.03	749,062	8.06
40 - 44 years	3,868	6.95	657,087	7.07
45 - 49 years	2,796	5.03	523,730	5.63
50 - 54 years	2,258	4.06	424,389	4.57
55 - 59 years	1,763	3.17	392,787	4.23
60 - 64 years	1,518	2.73	401,936	4.32
65 - 69 years	1,128	2.03	369,111	3.97
70 - 74 years	776	1.39	286,727	3.08
75 - 79 years	475	0.85	212,494	2.29
80 - 84 years	271	0.49	133,222	1.43
85 years & older	160	0.23	106,907	1.15
	MDN=25.6		MDN=33.04	

Notes: Based on 1990 U.S. Census data.
Percentages may not sum to totals due to rounding.

AMERICAN INDIANS, WAYNE COUNTY
AND WAYNE COUNTY RESIDENTS

AGE DISTRIBUTION: NUMBER AND PERCENT

AGE GROUP	AM INDIANS, WAYNE COUNTY		WAYNE COUNTY, ALL RACES	
	NUMBER	PERCENT	NUMBER	PERCENT
All ages	8,048	100.00	2,111,687	100.00
Under 5 years	663	8.24	170,851	8.09
5 - 9 years	657	8.16	154,194	7.30
10 - 14 years	614	7.63	151,000	7.15
15 - 19 years	699	8.69	159,187	7.54
20 - 20 years	711	8.83	154,593	7.32
25 - 29 years	754	9.37	174,944	8.28
30 - 34 years	791	9.83	185,129	8.77
35 - 39 years	651	8.09	167,021	7.91
40 - 44 years	613	7.62	144,403	6.84
45 - 49 years	438	5.44	111,004	5.26
50 - 54 years	367	4.56	90,654	4.29
55 - 59 years	267	3.32	88,403	4.19
60 - 64 years	305	3.79	95,802	4.54
65 - 69 years	209	2.60	91,027	4.31
70 - 74 years	137	1.70	69,672	3.30
75 - 79 years	75	0.93	49,756	2.36
80 - 84 years	60	0.75	29,345	1.34
85 years & older	37	0.46	24,702	1.17
	MDN=29.19		MDN=29.92	

Notes: Based on 1990 U.S. Census data.
Percentages may not sum to totals due to rounding.

MICHIGAN INDIANS
(BY COUNTY)

1990 CENSUS POPULATION STATISTICS

COUNTY	# MICHIGAN INDIANS	% OF MICH. INDIANS
ALCONA	56	0.5 %
ALGER	304	3.4 %
ALLEGAN	543	0.6 %
ALPENA	93	0.3 %
ANTRIM	211	1.2 %
ARENAC	139	0.9 %
BARAGA	918	11.5 %
BARRY	188	0.4 %
BAY	726	0.6 %
BENZIE	237	1.9 %
BERRIEN	685	0.4 %
BRANCH	221	0.5 %
CALHOUN	696	0.5 %
CASS	469	0.9 %
CHARLEVOIX	378	1.8 %
CHEBOYGEN	478	2.2 %
CHIPPEWA	3820	11.0 %
CLARE	160	0.6 %
CLINTON	276	0.5 %
CRAWFORD	145	1.2 %
DELTA	809	2.1 %
DICKINSON	135	0.5 %
EATON	438	0.5 %
EMMET	683	2.7 %
GENESEE	3132	0.7 %
GLADWIN	114	0.5 %
GEOEBIC	283	1.6 %
GRAND TRAVERSE	555	0.9 %
GRATIOT	144	0.4 %
HILLSDALE	143	0.3 %
HOUGHTON	153	0.4 %
HURON	89	0.3 %
INGHAM	1941	0.7 %
IONIA	221	0.4 %
IOSCO	228	0.8 %
IRON	102	0.8 %
ISABELLA	1020	1.9 %
JACKSON	655	0.4 %
KALAMAZOO	1017	0.5 %

MICHIGAN INDIANS (BY COUNTY)

1990 CENSUS POPULATION STATISTICS

COUNTY	# MICHIGAN INDIANS	% OF MICH. INDIANS
KALKASKA	114	0.8 %
KENT	2756	0.6 %
KEWEENAW	4	0.2 %
LAKE	81	0.9 %
LAPEER	319	0.4 %
LEELANAU	451	0.5 %
LENAWEE	303	0.3 %
LIVINGSTON	705	0.6 %
LUCE	313	5.7 %
MACKINAC	1691	15.8 %
MACOMB	2639	0.4 %
MANISTEE	189	0.9 %
MARQUETTE	943	1.3 %
MASON	188	0.7 %
MECOSTA	258	0.7 %
MENOMINEE	382	1.5 %
MIDLAND	334	0.4 %
MISSAUKEE	74	0.6 %
MONROE	481	0.4 %
MONTCALM	384	0.7 %
MONTMORENCY	48	0.5 %
MUSKEGON	1338	0.8 %
NEWAYGO	248	0.6 %
OAKLAND	3948	0.4 %
OCEANA	242	1.1 %
OGEMAW	140	0.7 %
ONTONAGON	109	1.2 %
OSCELOA	117	0.6 %
OSCODA	41	0.5 %
OTSEGO	103	0.6 %
OTTAWA	638	0.3 %
PRESQUE ISLE	43	0.3 %
ROSCOMMON	101	0.5 %
SAGINAW	915	0.4 %
ST. CLAIR	745	0.5 %
ST. JOSEPH	226	0.4 %
SANILAC	195	0.5 %
SCHOOLCRAFT	519	0.6 %
SHIAWASSEE	397	0.6 %
TUSCOLA	345	0.6 %
VAN BUREN	646	0.9 %
WASTENAW	1076	0.4 %
WAYNE	8048	0.4 %
WEXFORD	178	0.7 %

MICHIGAN INDIANS
% POPULATION BY COUNTY

KEWEENAW .2

HOUGHTON 0.4

ONTONAGON 1.2

GOGEBIC 1.6

BARAGA 11.5

IRON 0.8

MARQUETTE 1.3

DICKINSON 0.5

MEN-OMINEE 1.5

DELTA 2.1

ALGER 3.4

SCHOOLCRAFT 0.6

LUCE 5.7

CHIPPEWA 11.0

MACKINAC 15.8

EMMET 2.7

CHEBOYGAN 2.2

PRESQUE ISLE 0.3

CHARLEVOIX 1.8

LEE-LANAU .3

ANTRIM 1.2

OTSEGO 0.6

MONTMORENCY 0.5

ALPENA 0.3

BENZIE 1.9

GRAND TRAVERSE 0.9

KALKASKA 0.8

CRAWFORD 1.2

OSCODA 0.6

ALCONA 0.5

MANISTEE 0.9

WEXFORD 0.7

MISSAUKEE 0.6

ROSCOMMON 0.5

OGEMAW 0.7

IOSCO 0.8

MASON 0.7

LAKE 0.9

OSCEOLA 0.6

CLARE 0.6

GLADWIN 0.5

ARENAC 0.9

HURON 0.3

OCEANA 1.1

NEWAYGO 0.6

MECOSTA 0.7

ISABELLA 1.9

MIDLAND 0.4

BAY 0.6

TUSCOLA 0.6

SANILAC 0.5

MUSKEGON 0.8

KENT 0.6

MONTCALM 0.7

GRATIOT 0.9

SAGINAW 0.4

GENESEE 0.7

LAPEER 0.4

ST CLAIR 0.5

OTTAWA 0.3

IONIA 0.4

CLINTON 0.5

SHIAWASSEE 0.6

OAKLAND 0.4

MACOMB 0.4

ALLEGAN 3.4

BARRY 0.4

EATON 0.5

INGHAM 0.7

LIVINGSTON 0.6

VAN BUREN 0.9

KALAMAZOO 0.5

CALHOUN 0.5

JACKSON 0.4

WASHTENAW 0.4

WAYNE 0.4

BERRIEN 0.4

CASS 0.9

ST. JOSEPH 0.4

BRANCH 0.5

HILLSDALE 0.3

LENAWEE 0.3

MONROE 0.4

· 1990 U.S. Census figures do not reflect accurate Indian Population figures according to Michigan Commission on Indian Affairs. Undercount is estimated to be between 30,000 and 50,000.

1990 CENSUS

MICHIGAN INDIANS
POPULATION BY COUNTY

KEWEENAW 4

HOUGHTON 153

ONTONAGON 109

BARAGA 918

GOGEBIC 283

MARQUETTE 943

IRON 102

ALGER 304

LUCE 313

CHIPPEWA 3820

DICKINSON 135

SCHOOLCRAFT 519

DELTA 809

MACKINAC 1691

MENOMINEE 382

EMMET 683

CHEBOYGAN 478

PRESQUE ISLE 43

CHARLEVOIX 378

OTSEGO 103

MONTMORENCY 43

ALPENA 93

451

ANTRIM 211

LEELANAU

KALKASKA 114

CRAWFORD 145

OSCODA 41

ALCONA 56

BENZIE 237

GRAND TRAVERSE 555

MANISTEE 189

WEXFORD 178

MISSAUKEE 74

ROSCOMMON 101

OGEMAW 140

IOSCO 228

MASON 188

LAKE 81

OSCEOLA 117

CLARE 160

GLADWIN 114

ARENAC 139

HURON 89

OCEANA 242

NEWAYGO 248

MECOSTA 258

ISABELLA 1020

MIDLAND 334

BAY 726

TUSCOLA 345

SANILAC 195

MUSKEGON 1338

MONTCALM 384

GRATIOT 144

SAGINAW 915

KENT 2756

GENESEE 3132

LAPEER 319

ST. CLAIR 745

OTTAWA 638

IONIA 221

CLINTON 276

SHIAWASSEE 397

OAKLAND 3948

MACOMB 2639

ALLEGAN 543

BARRY 188

EATON 438

INGHAM 1941

LIVINGSTON 705

VAN BUREN 646

KALAMAZOO 1017

CALHOUN 696

JACKSON 655

WASHTENAW 1076

WAYNE 8048

BERRIEN 685

CASS 469

ST. JOSEPH 226

BRANCH 221

HILLSDALE 143

LENAWEE 451

MONROE 481

1990 CENSUS

U.S. AMERICAN INDIAN POPULATION, IN THOUSANDS (NOT INCLUDING ESKIMOS/ALEUTS)

WA 78
OR 37
NV 19
CA 236
ID 14
UT 24
AZ 203
MT 48
WY 9
CO 27
NM 134
ND 26
SD 51
NB 12
KS 22
OK 252
TX 64
MN 49
IA 7
MO 20
AR 13
LA 18
WI 39
IL 21
MI 55
IN 12
OH 20
KY 6
TN 10
MS 8
AL 16
NY 61
PA 14
WV 2
VA 15
NC 80
SC 8
GA 13
FL 35

VT 2
NH 2
ME 6
MA 12
RI 4
CT 7
NJ 15
DE 2
MD 13
D.C. 1

HA 5
AK 31

BASED ON 1990 STATISTICS, N=1,878 (IN THOUSANDS)
TOTAL N=1,959 W/ESKIMOS/ALEUTS, 1990 STATISTICS

AMERICAN INDIAN POPULATION, RANK ORDER OF STATES, USA

ORDER	STATE	STATE POP.	INDIAN POP.	% OF US
1	OKLAHOMA	3,145,585	252,420	12.88 %
2	CALIFORNIA	29,760,021	252,164	12.36 %
3	ARIZONA	3,665,228	203,527	10.39 %
4	NEW MEXICO	1,515,069	134,355	6.86 %
5	ALASKA	550,043	85,698	4.37 %
6	WASHINGTON	4,866,692	81,483	4.11 %
7	N. CAROLINA	6,628,637	80,155	4.09 %
8	TEXAS	16,986,510	65,877	3.36 %
9	NEW YORK	17,990,455	62,651	3.20 %
10	MICHIGAN	9,295,297	55,638	2.84 %
11	SOUTH DAKOTA	696,004	50,575	2.58 %
12	MINNESOTA	4,375,099	49,909	2.55 %
13	MONTANA	799,065	47,679	2.43 %
14	WISCONSIN	4,891,769	39,387	2.01 %
15	OREGON	2,842,321	38,496	1.96 %
16	FLORIDA	12,937,926	36,355	1.86 %
17	COLORADO	3,294,394	27,776	1.42 %
18	NORTH DAKOTA	638,800	25,917	1.32 %
19	UTAH	1,722,850	24,283	1.24 %
20	KANSAS	2,477,574	21,965	1.12 %
21	ILLINOIS	11,430,602	21,836	1.11 %
22	OHIO	10,847,115	20,358	1.04 %
23	MISSOURI	5,117,073	19,835	1.01 %
24	NEVADA	1,201,833	19,367	1.00 %
25	LOUISIANA	4,219,973	18,541	0.95 %
26	ALABAMA	4,040,587	16,506	0.84 %
27	VIRGINIA	6,187,358	15,282	0.78 %
28	NEW JERSEY	7,730,188	14,970	0.76 %
29	PENNSYLVANIA	11,881,643	14,733	0.75 %
30	IDAHO	1,006,749	13,780	0.70 %
31	GEORGIA	6,478,216	13,348	0.68 %
32	MARYLAND	4,781,468	12,792	0.65 %
33	ARKANSAS	2,350,725	12,773	0.65 %
34	INDIANA	5,544,159	12,720	0.65 %
35	NEBRASKA	1,578,385	12,410	0.63 %
36	MASSACHUSETTS	6,016,425	12,241	0.63 %
37	TENNESSEE	4,877,587	10,039	0.51 %
38	WYOMING	453,588	9,479	0.48 %
39	MISSISSIPPI	2,573,216	8,525	0.44 %
40	S. CAROLINA	3,486,703	8,246	0.42 %
41	IOWA	2,776,755	7,349	0.38 %
42	CONNECTICUT	3,287,116	6,654	0.34 %
43	MAINE	1,227,928	5,988	0.31 %
44	KENTUCKY	3,685,296	5,769	0.29 %
45	HAWAII	1,108,229	5,099	0.26 %
46	RHODE ISLAND	1,003,464	4,071	0.21 %
47	WEST VIRGINIA	1,793,477	2,458	0.13 %
48	NEW HAMPSHIRE	1,109,252	2,134	0.11 %
49	DELEWARE	666,168	2,019	0.10 %
50	VERMONT	562,758	1,696	0.08 %
51	WASHINGTON D.C.	606,900	1,466	0.07 %

NOTE: U.S. Total of American Indians: N = 1,959,234. (1990 U.S. Census).

AMERICAN INDIANS/ESKIMO/ALEUT POPULATION BY AREA AND STATE

STATES, BY AREA	POPULATION: ALL PERSONS, ALL AGES	AMERICAN INDIANS, ESKIMOS/ALEUTS	PERCENT OF STATE POP.
NEW ENGLAND			
MAINE	1,227,928	5,988	0.49 %
NEW HAMPSHIRE	1,109,252	2,134	0.19 %
VERMONT	562,758	1,696	0.30 %
MASSACHUSETTS	6,016,425	12,241	0.20 %
RHODE ISLAND	1,003,464	4,071	0.40 %
CONNECTICUT	3,287,116	6,654	0.20 %
MIDDLE ATLANTIC			
NEW YORK	17,990,455	62,651	0.35 %
NEW JERSEY	7,730,188	14,970	0.19 %
PENNSYLVANIA	11,881,643	14,733	0.12 %
EAST NORTH CENTRAL			
OHIO	10,847,115	20,358	0.19 %
INDIANA	5,544,159	12,720	0.23 %
ILLINOIS	11,430,602	21,836	0.19 %
MICHIGAN	9,295,297	55,638	0.60 %
WISCONSIN	4,891,769	39,387	0.81 %
WEST NORTH CENTRAL			
MINNESOTA	4,375,099	49,909	1.24 %
IOWA	2,776,755	7,349	0.26 %
MISSOURI	5,117,073	19,835	0.39 %
NORTH DAKOTA	638,800	25,917	4.06 %
SOUTH DAKOTA	696,004	50,575	7.27 %
NEBRASKA	1,578,385	12,410	0.79 %
KANSAS	2,477,574	21,965	0.89 %
SOUTH ATLANTIC			
DELAWARE	666,168	2,019	0.30 %
MARYLAND	4,781,468	12,792	0.27 %
WASHINGTON D.C.	606,900	1,466	0.24 %
VIRGINIA	6,187,358	15,282	0.25 %
WEST VIRGINIA	1,793,477	2,458	0.14 %
N. CAROLINA	6,628,637	80,155	1.21 %
S. CAROLINA	3,486,703	8,246	0.24 %
GEORGIA	6,478,216	13,348	0.21 %
FLORIDA	12,937,926	36,355	0.28 %

EAST SOUTH CENTRAL

KENTUCKY	3,685,296	5,769	0.16 %
TENNESSEE	4,877,587	10,039	0.21 %
ALABAMA	4,040,587	16,506	0.41 %
MISSISSIPPI	2,573,216	8,525	0.33 %

WEST SOUTH CENTRAL

LOUISIANA	4,219,973	18,541	0.54 %
ARKANSAS	2,350,725	12,773	0.45 %
OKLAHOMA	3,145,585	252,420	8.02 %
TEXAS	16,986,510	65,877	0.39 %

MOUNTAIN

MONTANA	799,065	47,679	5.97 %
IDAHO	1,006,749	13,780	1.37 %
WYOMING	453,588	9,479	2.09 %
COLORADO	3,294,394	27,776	0.84 %
NEW MEXICO	1,515,069	134,355	8.87 %
ARIZONA	3,665,228	203,527	5.55 %
UTAH	1,722,850	24,283	1.41 %
NEVADA	1,201,833	19,367	1.63 %

PACIFIC

WASHINGTON	4,866,692	81,483	1.67 %
OREGON	2,842,321	38,496	1.35 %
CALIFORNIA	29,760,021	252,164	0.81 %
ALASKA	550,043	85,698	15.58 %
HAWAII	1,108,229	5,099	0.46 %

TOTAL: UNITED STATES	242,709,873	1,959,234	0.79 %

Based on 1990 U.S. Census figures.

APPENDIX C

**PARTICIPANTS: ADVISORY BOARD AND INTERVIEWERS
MAPS OF MICHIGAN INDIAN TRIBES AND URBAN CENTERS**

ACKNOWLEDGEMENT OF PARTICIPANTS IN PHASE I: 1985 - 1990

The Indian Health Planning and Advisory Council was involved with the project from its inception. Throughout the years, a number of individuals and organizations have contributed to the process involved in the creation of this report. This section is to acknowledge and send thanks to the following people for all their caring efforts without which this would not have been possible.

In alphabetical order, Indian Health Planning and Advisory Council Members in this time frame included:

Veda D. Balla, Genessee Indian Center
* Thomas Biron, Michigan Department of Mental Health
Bonnie Brady, Office of Aging
Wil Burnes, Genessee Indian Center
Ruth A. Bussey, Grand Traverse Band of Ottawa/Chippewa Indians
* William Church, Indian Affairs Commission
Fred Dakota, Keweenaw Bay Indian Community
Maxine M. Deverney, Lac Vieux Desert Band
Audrey Falcon, Saginaw Chippewa Indian Tribe
Sam Fisher, Genessee Indian Center
Maxine M. Hazen, Lac Vieux Desert Band
Thelma Henry-Shipman, Michigan Department of Social Services
* Charlotte Hewitt, Department of Health and Human Services, IHS
Theodore Holappa, Keweenaw Bay Indian Community
* Valorie Johnson, Michigan Department of Social Services
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Shelly Maiorana, Grand Traverse Band of Ottawa and Chippewa Indians
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J. Wagner Wheeler, Grand Rapids Inter-Tribal
Linda Yazel, Potawatomi Indian Nation, Inc.

* Ex-Officio Member of the Council

At various times, there were also a number of other contributors to the process who were not members of the Advisory Council including:

Phil Alexis, Michigan Confederated Historical Tribes
Marie Harrison, Detroit American Indian Health Center
Diana Knauf, Sault Ste. Marie Tribe of Chippewa Indians
Bonnie Pilat, Saginaw Inter-Tribal Association, Inc.
Angie Topash, Potawatomi Indian Nation, Inc.
Andrea White, Detroit American Indian Health Center

Participants from Regional Data Collection Meetings include:

Gaylord Area:

JoAnn Carey, CHR
Pat Racette, Barzyz Michigan
Robert Wabackeck, Saginaw Inter-Tribal
Quintin Walker, M.I.E.T.S.

Lansing Area:

Wesley L. Andrews, M.I.E.T.S.
Charmaine Berry, Tuscola County Health Department
Audrey Dunlap, Title IV-A
Mary Jane Elliott, S.I.T.A.
Deborah S. Gahrman, S.I.T.A.
Adrienne Giling, CHR
Karen Kay, M.I.E.T.S.
Betty Kienitz, Indian Commission
William LeBlanc, MI Vets Trust Fund
Cyrena Lester, Title IV-A
Jodie Palmer, Title IV-A
Steve Parsons, MIETS
George Roy, Title IV-A
Janet Shomin, Native American Indian Program
Janet Wesaw, S.I.T.A.

Detroit Area:

Jeanette Allison, Detroit Indian Center
Keith D. Brant, N.A.I.A.
George Cherrick
Elizabeth Jacks
Mary E. Paskenee, CHR - Macomb/St. Clair Counties
Nancy Ragsdale, S.E.M.I.I.
Dolores Reynolds, Detroit American Indian Health Center
Leslie Ruditis, Oakland County CHR Workers
Irene Scarborough
Collette Schott, Urban Indian Affairs

MDPH Administration Members/Participants include:

Cheryl Anderson-Small, MDPH, Office of Minority Health
Chester J. Eagleman, MDPH, Indian Health Coordinator
Martin Halpern, MDPH, Center for Health Promotion
Charles W. McLeod, Jr., MDPH, Deputy Director for Administration

State Agency Staff interviewed include:

Kathy Arnaldi, Adolescent Health Survey, Public Health
Edie Clarke, Substance Abuse Services, Public Health
Dick Calkins, Substance Abuse Services, Public Health
Janey Eyster, Statistical Services, Public Health
Donna Hutton, Maternal and Child Health, Public Health
Les Gimmell, Department of Education, Title V Education
Judy Pasquarella, Substance Abuse Services, Public Health
Jack Thrush, Center for Health Promotion, Public Health

C-2: 1992-1993 Indian Health Planning and Advisory Council
Michigan Department of Public Health

An alphabetized listing of current, 1992-1993, members of the Michigan Department of Public Health's Indian Health Planning and Advisory Council follows:

Ruth A. Bussey
Health Director
Grand Traverse Band of Ottawa
  and Chippewa Indians

Marie (Lucy) Harrison
Administrator
Detroit American Indian
  Health Center

Charlotte Hewitt
Health Service Director
I. T. C. of Michigan, Inc.

Laurel Keenan
Health Director
Bay Mills Indian Community

Beatrice McGeshick
Health Director
Lac Vieux Desert Band

Celia Perez-Booth and
Rosemary Peterson
Genesee Valley Indian Assoc.

John Seppanen
Health Director
Keweenaw Bay Indian Community

Sharon Teeple
Executive Director
Inter-Tribal Council of Michigan, Inc.

Sharon Winters
Tribal Operations Manager
Potawatomi Indians Nation, Inc.

Mary Lindemann
Office of Services to the Aging

(Vacant)
Indian Health Director
Michigan Dept. of Public Health
Managed Care Div: Janet Olszewski

Audrey Falcon
Health Director
Saginaw Chippewa Indian Tribe

Thelma Henry-Shipman
Director, Urban Indian Affairs
Michigan Dept of Social Services

Valorie Johnson
Native American Services
Michigan Dept of Social Services

Betty Kienitz
Interim Director
Michigan Indian Affairs Commission

Victoria C. Miller
Executive Director
Saginaw Inter-Tribal Assoc., Inc.

Levi A. Rickert
Interim Executive Director
Grand Rapids Inter-Tribal Council

Joan Spaulding
Lansing North American Indian Center

Darlene Williams, LPN
Community Health Nurse
Hannahville Health Center

Russ Vizina
Health Officer
Sault Ste. Marie Tribe of
  Chippewa Indians

(Vacant)
Michigan Dept of Mental Health
Director: Cheryl Anderson-Small

(Vacant)
Local Public Health

1992 AMERICAN INDIAN HEALTH PROFILE
INTERVIEWER LIST

Frank	Alberts
Nancy	Brant
JoAnn	Carey
Julie	D'Artagnan
Kelly	David
Bonneita	Drake
Cherri	Farero
Anthony	Harris
Cheryl	Hoffman
Rose	Holmberg
Roxene	Judson
Louise	Kane
Geraldine	Knauf
Yvonne	LaPalm
Sharron	Lasley
Joann	Leblanc
Nonda	Lynn
Myrtle	McCall
Rose	Menard
Carolyn	Milk
Carole	Olson
Mary Eva	Pashenee
Diane	Peters
Bonnie	Pilat
Vivian	Price
Angel	Quintero
Ruth	Davis
Tom	Sauro
Donalda	Schofield
Collette	Schott
Melissa	Scott
Alice	Shawana
Janet	Shomin
Rose	Silvey
Ronda	Spencer
Robin	Stone
Deborah	Synder
Kelly	Thompson
Robert	Wabagkeck

MICHIGAN'S FEDERALLY RECOGNIZED TRIBES

KEY   MICHIGAN FEDERALLY RECOGNIZED TRIBES

1   BAY MILLS CHIPPEWA
      INDIAN COMMUNITY

2   GRAND TRAVERSE BAND OF
      OTTAWA & CHIPPEWA INDIANS

3   HANNAHVILLE POTAWATOMI
      INDIAN COMMUNITY

4   KEWAEENAW BAY
      INDIAN COMMUNITY

5   LAC VIEUX DESERT BAND OF LAKE
      SUPERIOR CHIPPEWA INDIANS

6   SAGINAW CHIPPEWA
      INDIAN TRIBE

7   SAULT STE. MARIE TRIBE
      OF CHIPPEWA INDIANS
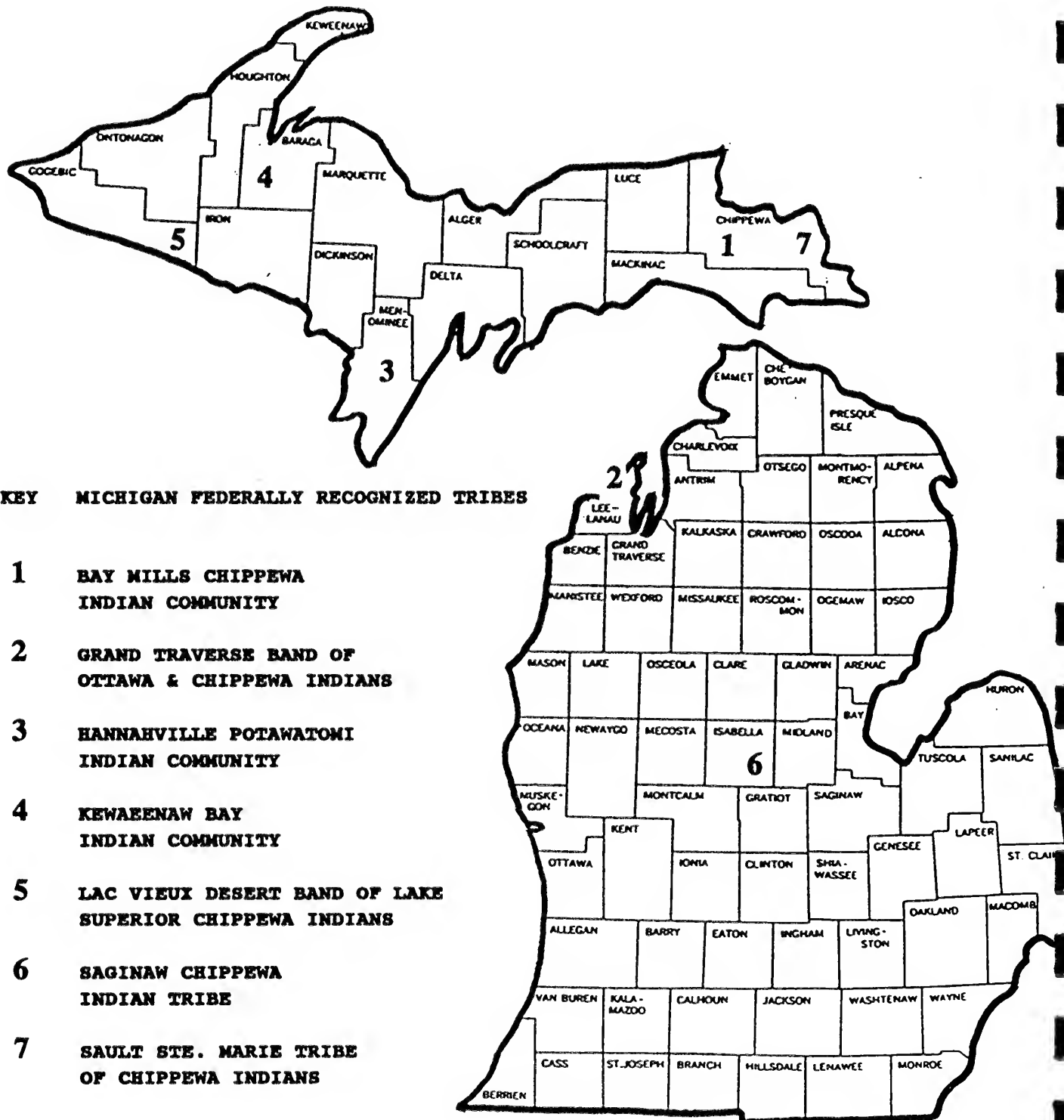
MICHIGAN'S FEDERALLY RECOGNIZED TRIBES

1. BAY MILLS CHIPPEWA INDIAN COMMUNITY

Rural Route 1, Box 13
Brimley, MI 49715
(906) 248-3241

2. GRAND TRAVERSE BAND OF OTTAWA AND CHIPPEWA INDIANS

Route 1, Box 135
Suttons Bay, MI 49682
(616) 271-3538

3. HANNAHVILLE POTAWATOMI INDIAN COMMUNITY

N-14910 Hannahville, B-1
Wilson Road
Wilson, MI 49896-9717
(906) 466-2342

4. KEWEENAW BAY INDIAN COMMUNITY

Route 1, Box 45
Baraga, MI 49908
(906) 353-6623

5. LAC VIEUX DESERT BAND OF LAKE SUPERIOR CHIPPEWA INDIANS

P.O. Box 446
Watersmeet, MI 49969
(906) 358-4577

6. SAGINAW CHIPPEWA INDIAN TRIBE

7070 E. Broadway
Mt. Pleasant, MI 48858
(517) 772-5700

7. SAULT STE. MARIE TRIBE OF CHIPPEWA INDIANS

206 Greenough Street
Sault Ste. Marie, MI 49783
(906) 632-6050

MICHIGAN'S STATE HISTORIC TRIBES

KEY   MICHIGAN STATE HISTORIC TRIBES

**1   BURT LAKE BAND OF OTTAWA
AND CHIPPEWA INDIANS**

**2   GUN LAKE BAND OF
GRAND RIVER OTTAWA INDIANS**

3   HURON POTAWATOMI

**4   LITTLE RIVER BAND
OF OTTAWA INDIANS**

**5   LITTLE TRAVERSE BAY BAND
OF ODAWA INDIANS**

**6   POTAWATOMI INDIAN NATION
(POKAGON BAND)**
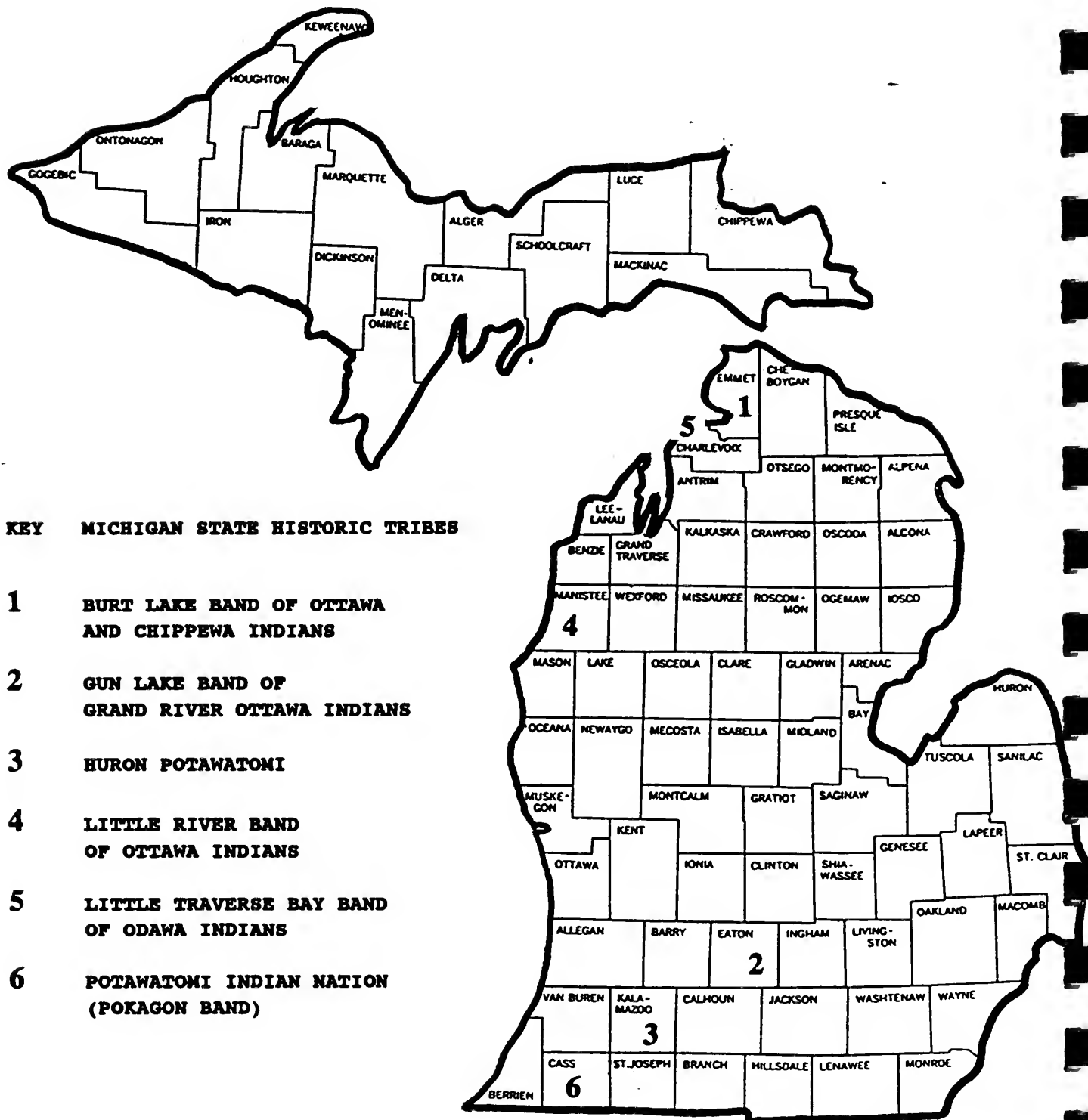
MICHIGAN'S STATE HISTORIC TRIBES

1. BURT LAKE BAND OF OTTAWA AND CHIPPEWA INDIANS

6461 E. Brutus Road
P.O. Box 206
Brutus, MI 49716
(616) 529-6113

2. GUN LAKE BAND OF GRAND RIVER OTTAWA INDIANS

5721 Grand River Drive
Grand Ledge, MI 48837

3. HURON POTAWATOMI

2221 1-Mile Road
Fulton, MI 49052
(616) 729-5151

4. LITTLE RIVER BAND OF OTTAWA INDIANS

409 Water
Manistee, MI 49660
(616) 723-8288

5. LITTLE TRAVERSE BAY BAND OF ODAWA INDIANS

1345 U.S. 31-N
P.O. Box 4009
Petoskey, MI 49770
(616) 348-3140

6. POTAWATOMI INDIAN NATION

(POKAGON BAND)
53237 Town Hall Road
Dowagiac, MI 49047
(616) 782-6323

MICHIGAN
URBAN INDIAN CENTERS

1. N. AMERICAN INDIAN ASSOC. OF DET.
2. AMERICAN INDIAN HEALTH SERVICE,
      DETROIT OFFICE
3. AMERICAN INDIAN SERVICES
4. MICHIGAN URBAN INDIAN CONSORTIUM
5. LANSING INDIAN CENTER
6. SOUTHEASTERN MICHIGAN INDIANS, INC.
7. GRAND RAPIDS INTERTRIBAL COUNCIL
8. SAGINAW INTERTRIBAL ASSOC., INC.
9. GENESEE VALLEY INDIAN CENTER
10. NATIVE AMERICANS OF MARQUETTE, INC.
11. ANISHINABEG MOM-WEH CENTER

NOTE: ADDRESSES/PHONE #'S ON REVERSE

MICHIGAN URBAN INDIAN CENTERS

1. N. AMERICAN INDIAN ASSOC. OF DETROIT
22720 PLYMOUTH RD., DETROIT, MI 48239
(313)535-2966

2. AMERICAN INDIAN HEALTH SERVICE, DETROIT OFFICE
4400 LIVERNOIS AVE., DETROIT, MI 48210
(313)895-7859

3. AMERICAN INDIAN SERVICES
76 VICTOR, HIGHLAND PARK, MI 48203
(313)865-4433

4. MICHIGAN URBAN INDIAN CONSORTIUM
1320 N. CENTER ST., LANSING, MI 48906
(517)487-5409

5. LANSING INDIAN CENTER
1235 N. CENTER ST., LANSING, MI 48906
(517)487-5409

6. SOUTHEASTERN MICHIGAN INDIANS, INC.
26641 LAWRENCE, CENTER LINE, MI 48015
(313)456-1350

7. GRAND RAPIDS INTERTRIBAL COUNCIL
45 LEXINGTON AVE., NW, GRAND RAPIDS, MI 49504
(616)774-8331

8. SAGINAW INTERTRIBAL ASSOC., INC.
3239 CHRISTY WAY, SAGINAW, MI 48603
(517)792-4610

9. GENESEE VALLEY INDIAN CENTER
124 W. FIRST STREET, FLINT, MI 48502
(313)239-6621

10. NATIVE AMERICANS OF MARQUETTE, INC.
P.O. BOX 136, MARQUETTE, MI 49855

11. ANISHINBEG MOM-WEH CENTER
1219 FIRST AVE., SOUTH, ESCANABA, MI 49829
(906)786-0556

APPENDIX D

**RESPONDENT LETTER
COVER SHEET
QUESTIONNAIRE**

D-1 RESPONDENT LETTER

D-2 COVER SHEET FOR QUESTIONNAIRE

D-3 QUESTIONNAIRE

STATE OF MICHIGAN

JAMES J. BLANCHARD, Governor

DEPARTMENT OF PUBLIC HEALTH

3500 N. LOGAN
P.O. BOX 30035, LANSING, MICHIGAN 48909
Vernice Anthony Davis, Director

March 15, 1991

Dear Respondent Household:

This letter is to introduce our interviewer who will be calling on you to interview you about many of your needs and opinions about health services to American Indians in Michigan. There has been no complete and reliable state data upon which to effectively plan health services for Michigan's Native population. The purpose of the study is to determine the health needs of our state American Indian population in order to plan and advocate for better health services. The survey is being conducted by American Indian interviewers and sponsored by the Michigan Department of Public Health, Office of Minority Health and the Saginaw Inter-Tribal Association, Inc.

You have been randomly selected from lists submitted by Indian specific service agencies and state and federally recognized tribal groups. The participation of you and your family is very important to the success of the survey. Your participation is entirely voluntary and any information you give will be strictly confidential. You will be give a stipend for your time, which will take less than an hour. If you complete the interview you will be paid $15 for your time.

Thank you very much in advance. We know you will enjoy the interview and that we can all gain from learning firsthand what services you and others like you need in order to provide culturally sensitive, accessible health care. Please call any of us if you have any questions or concerns.

Sincerely,

Chester J. Eagleman   Elizabeth Chapleski   Bonnie Brady
Project Director   Principle Investigator   Project Manager
Office of Minority   Wayne State University   Wayne State University
Health   (313) 577-4862   (313) 577-8301
Department of Public
Health

MICHIGAN DEPARTMENT OF PUBLIC HEALTH
NATIVE AMERICAN HEALTH SURVEY

COVER SHEET

1. Interview # [1-3]

INTERVIEWER LABEL

2. Respondent Information:

Name:_____

Address:_____(City)_____(ZipCode)_____

3. Call Record:

Call #	Date	Day of the week	Time	Outcome (Interview, NOC, Appt,Ref)
1				
2				
3				
4				
5				
6				

*Indicate REFUSAL reason:

◯ Too sick or frail

◯ Too busy

◯ Not interested

◯ No reason given

◯ Other_____

4. The survey staff may want to verify I have done this interview and we need your correct name and address to pay you for your time.

May I verify your name and address, please? (*Read name and address listed on label.*)

5. Do you have a phone?   1 ☐ Yes _____   6.Phone #:(area code   )_____
                          2 ☐ No _____   [6]

LENGTH OF INTERVIEW ___ hr ___ mins [7-9]

MICHIGAN DEPARTMENT OF PUBLIC HEALTH
NATIVE AMERICAN HEALTH SURVEY

(Introduction:)

Hello, my name is _____. I am here on behalf of the Michigan Department of Public Health and the Saginaw Intertribal Association to talk with you about health conditions and concerns. Did you receive the letter introducing this project? -- (*Wait for response. If 'NO', show respondent copy of respondent letter).*

The information will be kept strictly confidential and will be used to plan for better delivery of health services to Native Americans in Michigan. Is there a member of any of the original tribes of the United States or Canada in this household?
(*If 'NO', thank the respondent for his/her time; if 'YES ':)* The interview will take a half hour to an hour.

The person I need to interview is the woman of the house.
(*If adult female, ask:)* Are you that person?
(*If there is no female head of house or no female in the house, ask to interview the male head of household).*
May I speak with her/him? When might I interview her/him?

(*If necessary, get a phone number to set an appointment.:*

(area code   )_____

Be sure to keep "call record", on the reverse side, up-to-date.)

If you have any questions, you may call the project coordinator: Chester Eagleman [(517)335-9288] or the principal investigator: Elizabeth Chapleski [(313)577-2297].

A. Demographics

EXACT TIME NOW:____:_____

(This statement must be read to all respondents):

This interview is completely confidential and voluntary. If I should come to any _ question you do not want to answer, let me know and we'll go on to the next question.

Throughout the interview I will be asking you questions about persons living in this household.

A1. Could you first tell me the <u>names</u> of the people who live here? Please tell me their names in order of age beginning with you and following with the oldest household member.

(Interviewer: Fill in A1 on the following page(page 2), and note it on the card provided for house- hold listing, which you will be using throughout the interview.)

A2(*01*). Are you a U.S. Citizen?

A3(*01*). What is your racial or ethnic group?

A4(*01*). What is your total quantum percent(%) Native American blood?

A5(*01*). What is your primary tribal affiliation? *(If "Other", code 12, and write in name of tribe.)*

A6(*01*). What is your secondary tribal affiliation? *(If "Other", code 12, and write in name of tribe.)*

(Continue for the other household members, 02 , 03 . . .:)

A2. Is *(name)* a U.S. Citizen?

A3 What is *(name)*'s racial or ethnic group?

A4 What is *(name)*'s total quantum percent(%) Native American blood?

A5 What is *(name)*'s primary tribal affiliation? *(If "Other," code 12, and write in name of tribe.)*

A6. What is *(name)*'s secondary tribal affiliation? *(If "Other," code 12, and write in name of tribe.)*

A1. Name (first and last)	A2 U.S. Citizen (Y/N) [10]	A3 Ethnicity [11]	A4 % NA [12]	A5 A6 Tribal Affiliation (Primary, Secondary) [13-14] [15-16]	Other Tribes
[4-5]					
01.	☐	☐	☐	☐☐ ☐☐	
02.	☐	☐	☐	☐☐ ☐☐	
03.	☐	☐	☐	☐☐ ☐☐	
04.	☐	☐	☐	☐☐ ☐☐	
05.	☐	☐	☐	☐☐ ☐☐	
06.	☐	☐	☐	☐☐ ☐☐	
07.	☐	☐	☐	☐☐ ☐☐	
08.	☐	☐	☐	☐☐ ☐☐	
09.	☐	☐	☐	☐☐ ☐☐	
10.	☐	☐	☐	☐☐ ☐☐	

Interviewer: Please complete each entry in the table using the codes provided.

Codes for Race/Ethnicity (A3)

1	Native American	4	Hispanic	7	Other
2	White	5	Asian	9	No response
3	Black (not Hispanic)	6	Pacific Islander		

Codes for Tribal Affiliation (A5 and A6)

01	Bay Mills Chippewa	09	Burt Lake Ottawa
02	Sault Band Chippewa	10	HB Potawatomi
03	Lac Vieux Chippewa	11	Pokagon Potawatomi
04	Keweenaw Bay Chippewa		
05	Hannahville Potawatomi	12	Other Tribe (specify) _____
06	Grand Traverse Ottawa		
07	Saginaw Chippewa	98	Don't know
08	Little Traverse Ottawa	99	Not applicable

A7. Tribal Enrollment

[17]

01. What is your tribal enrollment status? Are you enrolled, eligible but not enrolled, or are you not eligible for enrollment?

| 1 enrolled | 2 not enrolled | 3 not eligible |

A7a. Do you have an enrollment card?

1☐ Yes 2☐ No   [18]

How about the other people in the household?
(*Ask for each member of the household.:* Is [*name*] enrolled, eligible or not eligible? Does he/she have an enrollment card?*)

Enrollment Card ("X" only if "Yes")

Name (first only)

02. _____ | 1 enrolled | 2 not enrolled | 3 not eligible | 1 ☐ Yes

03. _____ | 1 enrolled | 2 not enrolled | 3 not eligible | 1 ☐ Yes

04. _____ | 1 enrolled | 2 not enrolled | 3 not eligible | 1 ☐ Yes

05. _____ | 1 enrolled | 2 not enrolled | 3 not eligible | 1 ☐ Yes

06. _____ | 1 enrolled | 2 not enrolled | 3 not eligible | 1 ☐ Yes

07. _____ | 1 enrolled | 2 not enrolled | 3 not eligible | 1 ☐ Yes

08. _____ | 1 enrolled | 2 not enrolled | 3 not eligible | 1 ☐ Yes

09. _____ | 1 enrolled | 2 not enrolled | 3 not eligible | 1 ☐ Yes

10. _____ | 1 enrolled | 2 not enrolled | 3 not eligible | 1 ☐ Yes

A8. Now, please tell me some basic information about each member of the household, starting with yourself?

A10*(01)*. What is the highest level of schooling you have completed?

A11*(01)*. What is your marital status?

A12*(01)*. What is your birthdate?

A8. What is (*name*)'s relationship to you?

A9. Is (*name*) male or female?

A10. What is the highest level of schooling (*name*)'s completed?

A11. What is (*name*)s marital status?

A12. What is (*name*)'s birthdate?

Interviewer: List all household members in the same order as section I. Please complete each entry in the table below using the codes provided.

Response Codes

(A8) Relation to Respondent	(A10) Education	(A11) Marital Status
0 Respondent	1 Less than high school	1 Never married
1 Spouse	2 Some high school	2 Married
2 Child	3 High school grad/GED	3 Separated
3 Sibling	4 Some college	4 Divorced
4 Parent	5 College graduate	5 Widowed
5 Grandchild	6 Post grad work	
6 Other relative		9 No response
7 Fiancee/sig. other	9 No response	
8 Non-relative		
9 No response		

	A8 Relation to Respondent	A9 Sex (M/F)	A10 Education	A11 Marital Status	A12 Date of Birth (Mo./Day/Yr.)		
Name (First, Last)	[19]	[20]	[21]	[22]	[23-24]	[25-26]	[27-28]
01. (Respondent)	0						
02.							
03.							
04.							
05.							
06.							
07.							
08.							
09.							
10.							

(Interviewer - record:)

A13. *Total number of adults in household:* ☐☐ [29-30]

A14. How many children 18 or under in household?: ☐☐ [31-32]
Specifically, what are their ages? *(Interviewer: record ages on control card.)*

B. Housing and Neighborhood

[33] **B1.** Do you live 1 ☐ On a reservation as a member   2 ☐ On a reservation but not a member
3 ☐ Near a reservation (less than 30 mi.)   4 ☐ Away from reservation (over 30 mi.)

[34] **B2.** Do you own or rent your housing?
1 ☐ Own
2 ☐ Rent
3 ☐ Other (*specify:*)_____

[35] **B3.** Type of dwelling: 1 ☐ Single Family House   4 ☐ Trailer
(Check one)   2 ☐ Multi Family House   5 ☐ Other (specify) _____
3 ☐ Apartment

B4. The following are problems common to neighborhoods or housing. For each, tell me if it is a big problem, a small problem, or no problem for you.

		Big problem	Small problem	No problem
[36]	**B4a.** Garbage or trash removal	2 ☐	1 ☐	0 ☐
[37]	**B4b.** Insect or rodent control	2 ☐	1 ☐	0 ☐
[38]	**B4c.** Drafty doors or windows	2 ☐	1 ☐	0 ☐
[39]	**B4d.** Poor insulation in walls or roof	2 ☐	1 ☐	0 ☐
[40]	**B4e.** Toilet facilities	2 ☐	1 ☐	0 ☐
[41]	**B4f.** Kitchen facilities	2 ☐	1 ☐	0 ☐
[42]	**B4g.** Sanitary water supply	2 ☐	1 ☐	0 ☐
[43]	**B4h.** Hot running water	2 ☐	1 ☐	0 ☐
[44]	**B4i.** Heating	2 ☐	1 ☐	0 ☐
[45]	**B4j.** Mortgage or rent payments	2 ☐	1 ☐	0 ☐

[46] **B5.** Do you have any other housing problems?

1 ☐ Yes   2 ☐ No

[47] **B5a.** If yes, please explain:_____

_____

C. Individual Profile - Respondent

Now I would like to ask you some questions about each member of the household, beginning with yourself.

Risk Factors

[48]   **C1.** How often do you participate in any sports or activity for at least 20-30 minutes? (For example, hiking, fast walking, jogging, swimming, wood cutting, dancing, skating, biking.)

1 ☐ At least 3 times a week
2 ☐ 1-2 times a week
3 ☐ 1-3 times a month
4 ☐ Less than once a month
5 ☐ Never

[49]   **C2.** Are you trying to lose weight? *(IF NO, GO TO C3)*   1 ☐ Yes   2 ☐ No
[50-52]   **C2a.** *(If yes)* How much are you trying to lose? _____
                   (pounds)

[53]   **C3.** Do you smoke cigarettes? *(IF NO, GO TO C4)*   1 ☐ Yes   2 ☐ No
[54]   **C3a.** *(If yes:)* More than three (3) cigarettes every day?   1 ☐ Yes   2 ☐ No
[55-56]   **C3b.** *(If yes:)* How many cigarettes/packs per day? _____
                   (packs)

[57]   **C4.** Do you drink wine, beer, or liquor? *(IF NO, GO TO C5)*   1 ☐ Yes   2 ☐ No
[58-59]   **C4a.** *(If yes:)* How many times did you drink over the last 30 days? _____ (number of times)
[60-61]   **C4b.** On average, how many drinks did you have per time? (*Drink*=a can of beer, 4 oz. wine or 1 shot of liquor) (enter response) _____
                   (number of drinks)

[62]   **C5.** Have you had a physical check-up within the last twelve months?   1 ☐ Yes   2 ☐ No

[63]   **C6.** Has your knowledge about AIDS increased? *(IF NO, GO TO C7)*   1 ☐ Yes   2 ☐ No
[64]   **C6a.** Has this knowledge changed your behavior in any way?   1 ☐ Yes   2 ☐ No

[65] **C7.** Do you try to watch your cholesterol or fat intake?   1 ☐ Yes   2 ☐ No

[66] **C8.** Are you on a special diet?   1 ☐ Yes   2 ☐ No

Physical Health

C9. In the past **twelve months**, have you been told by a doctor, nurse, health official, traditional healer or counselor that you have any of the following conditions?

[67]	**C9a.** Heart Disease	1 ☐ Yes	2 ☐ No	9 ☐ NA
[68]	**C9b.** Stroke/Effects of Stroke	1 ☐ Yes	2 ☐ No	9 ☐ NA
[69]	**C9c.** High Blood Pressure	1 ☐ Yes	2 ☐ No	9 ☐ NA
[70]	**C9d.** Diabetes	1 ☐ Yes	2 ☐ No	9 ☐ NA
[71]	**C9e.** High Cholesterol	1 ☐ Yes	2 ☐ No	9 ☐ NA
[72]	**C9f.** Tuberculosis	1 ☐ Yes	2 ☐ No	9 ☐ NA
[73]	**C9g.** Kidney Disease	1 ☐ Yes	2 ☐ No	9 ☐ NA
[74]	**C9h.** Chronic Liver Disease	1 ☐ Yes	2 ☐ No	9 ☐ NA
[75]	**C9i.** Cancer (including leukemia)	1 ☐ Yes	2 ☐ No	9 ☐ NA
	Specify type: _____			
[76]	**C9j.** Emphysema or Chronic Bronchitis	1 ☐ Yes	2 ☐ No	9 ☐ NA
[77]	**C9k.** Stomach Ulcers	1 ☐ Yes	2 ☐ No	9 ☐ NA
[78]	**C9l.** Arthritis or Rheumatism	1 ☐ Yes	2 ☐ No	9 ☐ NA
[79]	**C9m.** Hepatitis	1 ☐ Yes	2 ☐ No	9 ☐ NA
[80]	**C9n.** Asthma	1 ☐ Yes	2 ☐ No	9 ☐ NA
[81]	**C9o.** Thyroid or Other Glandular Problem	1 ☐ Yes	2 ☐ No	9 ☐ NA
[82]	**C9p.** Physical Disability - Injury	1 ☐ Yes	2 ☐ No	9 ☐ NA
[83]	**C9q.** Back or Spinal Problems	1 ☐ Yes	2 ☐ No	9 ☐ NA
[84]	**C9r.** Hayfever or Other Allergies	1 ☐ Yes	2 ☐ No	9 ☐ NA
[85]	**C9s.** Fetal Alcohol Syndrome	1 ☐ Yes	2 ☐ No	9 ☐ NA
[86]	**C9t.** Emotional or Behavioral Problems	1 ☐ Yes	2 ☐ No	9 ☐ NA

C10. Have you had any of the following in the **past twelve months?**

[87]	**C10a.** Chest Pain	1 ☐ Yes	2 ☐ No	9 ☐ NA
[88]	**C10b.** Frequent colds/cough	1 ☐ Yes	2 ☐ No	9 ☐ NA
[89]	**C10c.** Depresson	1 ☐ Yes	2 ☐ No	9 ☐ NA
[90]	**C10d.** Diarrhea	1 ☐ Yes	2 ☐ No	9 ☐ NA
[91]	**C10e.** Drinking Problem	1 ☐ Yes	2 ☐ No	9 ☐ NA
[92]	**C10f.** Colic	1 ☐ Yes	2 ☐ No	9 ☐ NA
[93]	**C10g.** Memory problems	1 ☐ Yes	2 ☐ No	9 ☐ NA
[94]	**C10h.** Frequent earaches	1 ☐ Yes	2 ☐ No	9 ☐ NA
[95]	**C10i.** Frequent headaches	1 ☐ Yes	2 ☐ No	9 ☐ NA
	C10j. Dehydration	1 ☐ Yes	2 ☐ No	9 ☐ NA
	C10k. Pain in joints	1 ☐ Yes	2 ☐ No	9 ☐ NA
	C10l. Flu or fever	1 ☐ Yes	2 ☐ No	9 ☐ NA
	C10m. Frequent upset stomach	1 ☐ Yes	2 ☐ No	9 ☐ NA
	C10n. Skin problems (itching/rashes)	1 ☐ Yes	2 ☐ No	9 ☐ NA
	C10o. Frequent swelling	1 ☐ Yes	2 ☐ No	9 ☐ NA
	C10p. Numbness/loss of feeling	1 ☐ Yes	2 ☐ No	9 ☐ NA

[]   **C11.** Within the **last twelve months,** have you had any **other** health problems?

     1 ☐ Yes *(specify)*_____

     2 ☐ No *(Go to* **C13***)*

C12. Have you consulted a doctor, nurse, health official, traditional healer or counselor about any of <u>these</u> **other** health problems?

     1 ☐ Yes *(specify which problems:)*_____

     2 ☐ No

[ ]   **C13.** How would you rate your overall health? *(Read choices)*

     1 ☐ Excellent
     2 ☐ Good
     3 ☐ Fair
     4 ☐ Poor
     5 ☐ Very Poor

Sources of Services

C14. Where do you **most frequently** go for medical services?

[102-103]   (*Interviewer: Check ONE ONLY; refer respondent to CARD A*)

01 ☐ County Health Department   08 ☐ HMO
02 ☐ Tribal Health Clinic   09 ☐ Tribal Healer
03 ☐ Emergency Room   10 ☐ Other (specify)
04 ☐ Private Doctor
05 ☐ Urban Indian Health Center   11 ☐ Don't use health services
06 ☐ Community Health Clinic   98 ☐ Don't know
07 ☐ Outpatient Medical Center   99 ☐ Refused

Services Used

C15. Have you used any of the following services during the **last twelve months**?
(*Interviewer: Refer respondent to CARD B /Check ALL that apply.*)

(used)   *(used)*

[104]	a. ☐ Family Planning	m. ☐ Lead Screening	[116]
[105]	b. ☐ Teen Pregnancy Prevention	n. ☐ Immunizations	[117]
[106]	c. ☐ Prenatal Care	o. ☐ Dental Services	[118]
[107]	d. ☐ WIC	p. ☐ Home Health Care	[119]
[108]	e. ☐ Maternal and Infant Support	q. ☐ Substance Abuse Services	[120]
[109]	f. ☐ EPSDT .	r. ☐ Mental Health Services	[121]
[110]	g. ☐ Crippled Children Services	s. ☐ Social Services	[122]
[111]	h. ☐ Hearing Screening	t. ☐ Traditional Healing Services	[123]
[112]	i. ☐ Vision Screening	u. ☐ Primary Care/Medical Services	[124]
[113]	j. ☐ Visiting Nurse	v. ☐ Homemaker Services	[125]
[114]	k. ☐ Children Day Care	w. ☐ Adult Day Care	[126]
[115]	l. ☐ Caregiver Respite Services	x. ☐ CHR's	[127]

(INTERVIEWER: IF NONE OF THE SERVICES LISTED WERE USED, "X" HERE →)   0 ☐ Used none

C16. Are there any services you might have used but didn't because they were unavailable?

[128]

1 ☐ Yes (*specify:*)_____ [129]

2 ☐ No

C17-C18. Health Aids

I am going to read a list of provisions many people need. Please tell me for each item, first, if you need it and then, if needed, do you have it?

C17a. Do you <u>need</u> a hearing aid?   *(If yes:)* C18a. Do you <u>have</u> a hearing aid?

		C17 Need				C18 Have		
				(IF YES) →				
[130]	a. Hearing Aid	1 ☐ Yes	2 ☐ No	*(If need hearing...:)*	1 ☐ Yes	2 ☐ No	[144]
[131]	b. Glasses	1 ☐ Yes	2 ☐ No	*(If need glasses:)*	1 ☐ Yes	2 ☐ No	[145]
[132]	c. Dentures	1 ☐ Yes	2 ☐ No	*(If need dentures:)*	1 ☐ Yes	2 ☐ No	[146]
[133]	d. Support Hose	1 ☐ Yes	2 ☐ No	*(If need hose:)*	1 ☐ Yes	2 ☐ No	[147]
[134]	e. Cane	1 ☐ Yes	2 ☐ No	*(If need cane:)*	1 ☐ Yes	2 ☐ No	[148]
[135]	f. Walker	1 ☐ Yes	2 ☐ No	*(If need walker:)*	1 ☐ Yes	2 ☐ No	[149]
[136]	g. Wheelchair	1 ☐ Yes	2 ☐ No	*(If need chair:)*	1 ☐ Yes	2 ☐ No	[150]
[137]	h. Leg Brace	1 ☐ Yes	2 ☐ No	*(If need leg brace:)*	1 ☐ Yes	2 ☐ No	[151]
[138]	i. Back Brace	1 ☐ Yes	2 ☐ No	*(If need back brace:)*	1 ☐ Yes	2 ☐ No	[152]
[139]	j. Artificial Limb	1 ☐ Yes	2 ☐ No	*(If need limb:)*	1 ☐ Yes	2 ☐ No	[153]
[140]	k. Braille Books	1 ☐ Yes	2 ☐ No	*(If need braille:)*	1 ☐ Yes	2 ☐ No	[154]
[141]	l. Colostomy Eqpmnt.	1 ☐ Yes	2 ☐ No	*(If need colostomy:)*	1 ☐ Yes	2 ☐ No	[155]
[142]	m. Catheter	1 ☐ Yes	2 ☐ No	*(If need catheter:)*	1 ☐ Yes	2 ☐ No	[156]
[143]	n. Kidney Dialysis	1 ☐ Yes	2 ☐ No	*(If need kidney:)*	1 ☐ Yes	2 ☐ No	[157]

Health Coverage

C19. How is your medical treatment paid for? (*Interviewer: refer respondent to* CARD C)

[158-159]

01 ☐ Employee group health policy

02 ☐ Individual policy

03 ☐ Medicaid

04 ☐ Medicare

05 ☐ Urban Indian Health Services

06 ☐ Tribal Contract Health Services

07 ☐ Ontario Health Insurance Plan (OHIP)

08 ☐ No insurance

09 ☐ Other

   (specify)_____

98 ☐ Don't know

99 ☐ Refused

C20. How much do you estimate you pay out-of-pocket for medical care <u>yearly</u>? (*Record:*)$_____

[160-163]

C. Individual Profile - 2nd Household Member

> *Interviewer: In this section, there are a number of questions about the health of household members, medical care they have received, the facilities that they use for health care, medical insurance, and employment. These questions are to be answered for each member of the household individually. Certain items do not apply to young children. When inquiring about household members under 10 years old, do not ask questions preceded by an asterisk (*).*

Now I would like to ask you some questions about the next member of the household, who is (*name*), listed as 02 on our list of household members.

Name of household member 02 _____

Risk Factors

[48] **C1.** How often does (*name*) participate in any sports or activity for at least 20-30 minutes? (For example, hiking, fast walking, jogging, swimming, wood cutting, dancing, skating, biking.)

1 ☐ At least 3 times a week
2 ☐ 1-2 times a week
3 ☐ 1-3 times a month
4 ☐ Less than once a month
5 ☐ Never

[49] **C2.** Is (*name*) trying to lose weight? *(IF NO, GO TO C3)*   1 ☐ Yes 2 ☐ No

[50-52] **C2a.** *(If yes)*How much is he/she trying to lose? _____
(pounds)

[53] * **C3.** Does (*name*) smoke cigarettes? *(IF NO, GO TO C4)*   1 ☐ Yes 2 ☐ No

[54] * **C3a.** *(If yes:)* More than three (3) cigarettes every day?   1 ☐ Yes 2 ☐ No

[55-56] * **C3b.** *(If yes:)* How many cigarettes/packs per day? _____
(packs)

[57] * **C4.** Does (*name*) drink wine, beer, or liquor?*(IF NO, GO TO C5)*   1 ☐ Yes 2 ☐ No

[58-59] * **C4a.** *(If yes:)*How many times did he/she drink over the last 30 days? _____ (number of times)

[60-61] * **C4b.** On average, how many drinks did he/she have per time? (*Drink*=a can of beer, 4 oz. wine or 1 shot of liquor) (enter response) _____
(number of drinks)

[62] **C5.** Has (*name*) had a physical check-up within the last twelve months?   1 ☐ Yes 2 ☐ No

[63] * **C6.** Has (*name*)'s knowledge about AIDS increased?*(IF NO, GO TO C7)* 1 ☐ Yes 2 ☐ No

[64] * **C6a.** Has this knowledge changed his/her behavior in any way?   1 ☐ Yes 2 ☐ No

[65]   **C7.** Does (*name*) try to watch his/her cholesterol or fat intake?   1 ☐ Yes   2 ☐ No

[66]   **C8.** Is he/she on a special diet?   1 ☐ Yes   2 ☐ No

Physical Health

C9. In the last **twelve months**, has (*name*) been told by a doctor, nurse, health official, traditional healer or counselor that he/she has any of the following conditions?

[67]	**C9a.** Heart Disease	1 ☐ Yes	2 ☐ No	9 ☐ NA
[68]	**C9b.** Stroke/Effects of Stroke	1 ☐ Yes	2 ☐ No	9 ☐ NA
[69]	**C9c.** High Blood Pressure	1 ☐ Yes	2 ☐ No	9 ☐ NA
[70]	**C9d.** Diabetes	1 ☐ Yes	2 ☐ No	9 ☐ NA
[71]	**C9e.** High Cholesterol	1 ☐ Yes	2 ☐ No	9 ☐ NA
[72]	**C9f.** Tuberculosis	1 ☐ Yes	2 ☐ No	9 ☐ NA
[73]	**C9g.** Kidney Disease	1 ☐ Yes	2 ☐ No	9 ☐ NA
[74]	**C9h.** Chronic Liver Disease	1 ☐ Yes	2 ☐ No	9 ☐ NA
[75]	**C9i.** Cancer (including leukemia)	1 ☐ Yes	2 ☐ No	9 ☐ NA

Specify type: _____

[76]	**C9j.** Emphysema or Chronic Bronchitis	1 ☐ Yes	2 ☐ No	9 ☐ NA
[77]	**C9k.** Stomach Ulcers	1 ☐ Yes	2 ☐ No	9 ☐ NA
[78]	**C9 l.** Arthritis or Rheumatism	1 ☐ Yes	2 ☐ No	9 ☐ NA
[79]	**C9m.** Hepatitis	1 ☐ Yes	2 ☐ No	9 ☐ NA
[80]	**C9 n.** Asthma	1 ☐ Yes	2 ☐ No	9 ☐ NA
[81]	**C9 o.** Thyroid or Other Glandular Problem	1 ☐ Yes	2 ☐ No	9 ☐ NA
[82]	**C9 p.** Physical Disability - Injury	1 ☐ Yes	2 ☐ No	9 ☐ NA
[83]	**C9 q.** Back or Spinal Problems	1 ☐ Yes	2 ☐ No	9 ☐ NA
[84]	**C9 r.** Hayfever or Other Allergies	1 ☐ Yes	2 ☐ No	9 ☐ NA
[85]	**C9 s.** Fetal Alcohol Syndrome	1 ☐ Yes	2 ☐ No	9 ☐ NA
[86]	**C9 t.** Emotional or Behavioral Problems	1 ☐ Yes	2 ☐ No	9 ☐ NA

C10. Has (*name*) had any of the following in the **past twelve months?**

[87]	C10a. Chest Pain	1 ☐ Yes	2 ☐ No	9 ☐ NA
[88]	C10b. Frequent colds/cough	1 ☐ Yes	2 ☐ No	9 ☐ NA
[89]	C10c. Depresson	1 ☐ Yes	2 ☐ No	9 ☐ NA
[90]	C10d. Diarrhea	1 ☐ Yes	2 ☐ No	9 ☐ NA
[91]	C10e. Drinking Problem	1 ☐ Yes	2 ☐ No	9 ☐ NA
[92]	C10f. Colic	1 ☐ Yes	2 ☐ No	9 ☐ NA
[93]	C10g. Memory problems	1 ☐ Yes	2 ☐ No	9 ☐ NA
[94]	C10h. Frequent earaches	1 ☐ Yes	2 ☐ No	9 ☐ NA
[95]	C10i. Frequent headaches	1 ☐ Yes	2 ☐ No	9 ☐ NA
	C10j. Dehydration	1 ☐ Yes	2 ☐ No	9 ☐ NA
	C10k. Pain in joints	1 ☐ Yes	2 ☐ No	9 ☐ NA
	C10l. Flu or fever	1 ☐ Yes	2 ☐ No	9 ☐ NA
	C10m. Frequent upset stomach	1 ☐ Yes	2 ☐ No	9 ☐ NA
	C10n. Skin problems (itching/rashes)	1 ☐ Yes	2 ☐ No	9 ☐ NA
	C10o. Frequent swelling	1 ☐ Yes	2 ☐ No	9 ☐ NA
	C10p. Numbness/loss of feeling	1 ☐ Yes	2 ☐ No	9 ☐ NA

[] **C11.** Within the **last twelve months**, has (*name*) had any **other** health problems?

     1 ☐ Yes (*specify*)_____

     2 ☐ No *(Go to* **C13***)*

[100] **C12.** Has (*name*) consulted a doctor, nurse, health official, traditional healer or counselor about any of <u>these</u> health problems?

     1 ☐ Yes (*specify which problems:*)_____

     2 ☐ No

[101] **C13.** How would you rate (*name*)'s overall health? (*Read choices*)

     1 ☐ Excellent
     2 ☐ Good
     3 ☐ Fair
     4 ☐ Poor
     5 ☐ Very Poor

Sources of Services

C14. Where does (*name*) most frequently go for medical services?

[102-103]   (*Interviewer: Check ONE ONLY; refer respondent to CARD A*)

01 ☐ County Health Department

02 ☐ Tribal Health Clinic

03 ☐ Emergency Room

04 ☐ Private Doctor

05 ☐ Urban Indian Health Center

06 ☐ Community Health Clinic

07 ☐ Outpatient Medical Center

08 ☐ HMO

09 ☐ Tribal Healer

10 ☐ Other (specify)

_____

11 ☐ Don't use health services

98 ☐ Don't know

99 ☐ Refused

Services Used

C15. Has (*name*) used any of the following services during the last twelve months?
(*Interviewer: Check ALL that apply; refer respondent to CARD B*)

(used)

[104]	* a.	☐ Family Planning	
[105]	* b.	☐ Teen Pregnancy Prevention	
[106]	* c.	☐ Prenatal Care	
[107]	d.	☐ WIC	
[108]	e.	☐ Maternal and Infant Support	
[109]	f.	☐ EPSDT	
[110]	g.	☐ Crippled Children Services	
[111]	h.	☐ Hearing Screening	
[112]	i.	☐ Vision Screening	
[113]	j.	☐ Visiting Nurse	
[114]	k.	☐ Children Day Care	
[115]	l.	☐ Caregiver Respite Services	

(used)

m.	☐ Lead Screening	[116]
n.	☐ Immunizations	[117]
o.	☐ Dental Services	[118]
p.	☐ Home Health Care	[119]
q.	☐ Substance Abuse Services	[120]
r.	☐ Mental Health Services	[121]
s.	☐ Social Services	[122]
t.	☐ Traditional Healing Services	[123]
u.	☐ Primary Care/Medical Services	[124]
v.	☐ Homemaker Services	[125]
* w.	☐ Adult Day Care	[126]
x.	☐ CHR's	[127]

(INTERVIEWER: IF NONE OF THE SERVICES LISTED WERE USED, "X" HERE →)   0 ☐ Used none

C16. Are there any services he/she might have used but didn't because they were unavailable?

[128]

1 ☐ Yes (*specify:*)_____ [129]

2 ☐ No

C17-C18. Health Aids

I am going to read a list of provisions many people need. Please tell me for each item, first, if (*name*) needs it and then, if needed, does he/she **have** it?

C17a. Does (*name*) <u>need</u> a hearing aid?   (*If yes:*) C18a. Does he/she <u>have</u> a hearing aid?

		C17 **Need**			**C18** **Have**	
			(IF YES) ⟶			
[130]	a. Hearing Aid	1☐Yes 2☐No	(*If need hearing...:*)	1☐Yes 2☐No	[144]
[131]	b. Glasses	1☐Yes 2☐No	(*If need glasses:*)	1☐Yes 2☐No	[145]
[132]	c. Dentures	1☐Yes 2☐No	(*If need dentures:*)	1☐Yes 2☐No	[146]
[133]	d. Support Hose	1☐Yes 2☐No	(*If need hose:*)	1☐Yes 2☐No	[147]
[134]	e. Cane	1☐Yes 2☐No	(*If need cane:*)	1☐Yes 2☐No	[148]
[135]	f. Walker	1☐Yes 2☐No	(*If need walker:*)	1☐Yes 2☐No	[149]
[136]	g. Wheelchair	1☐Yes 2☐No	(*If need chair:*)	1☐Yes 2☐No	[150]
[137]	h. Leg Brace	1☐Yes 2☐No	(*If need leg brace:*)	1☐Yes 2☐No	[151]
[138]	i. Back Brace	1☐Yes 2☐No	(*If need back brace:*)	1☐Yes 2☐No	[152]
[139]	j. Artificial Limb	1☐Yes 2☐No	(*If need limb:*)	1☐Yes 2☐No	[153]
[140]	k. Braille Books	1☐Yes 2☐No	(*If need braille:*)	1☐Yes 2☐No	[154]
[141]	l. Colostomy Eqpmnt.	1☐Yes 2☐No	(*If need colostomy:*)	1☐Yes 2☐No	[155]
[142]	m. Catheter	1☐Yes 2☐No	(*If need catheter:*)	1☐Yes 2☐No	[156]
[143]	n. Kidney Dialysis	1☐Yes 2☐No	(*If need kidney:*)	1☐Yes 2☐No	[157]

Health Coverage

C19. How is (*name*)'s medical treatment paid for? (*Interviewer: refer respondent to CARD C*)

[158-159]

01 ☐ Employee group health policy
02 ☐ Individual policy
03 ☐ Medicaid
04 ☐ Medicare
05 ☐ Urban Indian Health Services
06 ☐ Tribal Contract Health Services

07 ☐ Ontario Health Insurance Plan (OHIP)
08 ☐ No insurance
09 ☐ Other
      (specify)_____
98 ☐ Don't know
99 ☐ Refused

C20. How much do you estimate is paid out-of-pocket for (*name*)'s medical care <u>yearly</u>? (*Record:*) $_____

[160-163]

Occupation

C21. Is (*name*) doing any work for pay at the present time, either full-time or part-time?

    1 ☐ Yes (*Go to* **C21b**)
    2 ☐ No   (*Go to* **C21a**)

C21a. Is he/she:

    02 ☐ Temporarily Laid Off (*Go to* **C21b**)
    03 ☐ Unemployed (*Go to* **C21e**)
    04 ☐ Retired
    05 ☐ Homemaker
    06 ☐ Student   *(Go to NEXT HOUSEHOLD*
    97 ☐ Other   *MEMBER on next page(20),*
        (*specify*) _____ *or to Section D, page 38)*

C21b. What is (*name*)'s occupation? (*Record:*) _____

C21c. How many hours per (average)week does he/she work for pay?(*Record #hrs. for* <u>one</u> *week*)_____

C21d. Is (*name*) employed: 1 ☐ Private company/business
                        2 ☐ By government (Federal/State/Local)
                        3 ☐ Self-employed   *(Go to NEXT HOUSEHOLD*
                        4 ☐ On the reservation   *MEMBER on next page(20),*
                        5 ☐ Other (*specify*)_____ *or to Section D, page 38)*

C21e. (*If unemployed*) Has he/she been out of work for:

        1 ☐ More than one year, or
        2 ☐ Less than one year

C. Individual Profile - 3rd Household Member

Interviewer: In this section, there are a number of questions about the health of household members, medical care they have received, the facilities that they use for health care, medical insurance, and employment. These questions are to be answered for each member of the household individually. Certain items do not apply to young children. When inquiring about household members under 10 years old, do not ask questions preceded by an asterisk (*).

Now I would like to ask you some questions about the next member of the household, who is (*name*), listed as 03 on our list of household members.

Name of household member 03 _____

Risk Factors

[48]   **C1.** How often does (*name*) participate in any sports or activity for at least 20-30 minutes? (For example, hiking, fast walking, jogging, swimming, wood cutting, dancing, skating, biking.)

1 ☐ At least 3 times a week
2 ☐ 1-2 times a week
3 ☐ 1-3 times a month
4 ☐ Less than once a month
5 ☐ Never

[49]   **C2.** Is (*name*) trying to lose weight? *(IF NO, GO TO C3)*   1 ☐ Yes   2 ☐ No
[50-52]   **C2a.** *(If yes)*How much is he/she trying to lose? _____
(pounds)

[53]   * **C3.** Does (*name*) smoke cigarettes? *(IF NO, GO TO C4)*   1 ☐ Yes   2 ☐ No
[54]   * **C3a.** *(If yes:)* More than three (3) cigarettes every day?   1 ☐ Yes   2 ☐ No
[55-56]   * **C3b.** *(If yes:)* How many cigarettes/packs per day? _____
(packs)

[57]   * **C4.** Does (*name*) drink wine, beer, or liquor?*(IF NO, GO TO C5)*   1 ☐ Yes   2 ☐ No
[58-59]   * **C4a.** *(If yes:)*How many times did he/she drink over the last 30 days? _____(number of times)
[60-61]   * **C4b.** On average, how many drinks did he/she have per time? (*Drink*=a can of beer, 4 oz. wine or 1 shot of liquor) (enter response) _____
(number of drinks)

[62]   **C5.** Has (*name*) had a physical check-up within the last twelve months?   1 ☐ Yes   2 ☐ No

[63]   * **C6.** Has (*name*)'s knowledge about AIDS increased?*(IF NO, GO TO C7)*   1 ☐ Yes   2 ☐ No
[64]   *   **C6a.** Has this knowledge changed his/her behavior in any way?   1 ☐ Yes   2 ☐ No

[65]   **C7.** Does (*name*) try to watch his/her cholesterol or fat intake?   1 ☐ Yes   2 ☐ No

[66]   **C8.** Is he/she on a special diet?   1 ☐ Yes   2 ☐ No

Physical Health

C9. In the past twelve months; has (*name*) been told by a doctor, nurse, health official, traditional healer or counselor that he/she has any of the following conditions?

[67]	**C9a.** Heart Disease	1 ☐ Yes	2 ☐ No	9 ☐ NA
[68]	**C9b.** Stroke/Effects of Stroke	1 ☐ Yes	2 ☐ No	9 ☐ NA
[69]	**C9c.** High Blood Pressure	1 ☐ Yes	2 ☐ No	9 ☐ NA
[70]	**C9d.** Diabetes	1 ☐ Yes	2 ☐ No	9 ☐ NA
[71]	**C9e.** High Cholesterol	1 ☐ Yes	2 ☐ No	9 ☐ NA
[72]	**C9f.** Tuberculosis	1 ☐ Yes	2 ☐ No	9 ☐ NA
[73]	**C9g.** Kidney Disease	1 ☐ Yes	2 ☐ No	9 ☐ NA
[74]	**C9h.** Chronic Liver Disease	1 ☐ Yes	2 ☐ No	9 ☐ NA
[75]	**C9i.** Cancer (including leukemia)	1 ☐ Yes	2 ☐ No	9 ☐ NA
	Specify type: _____			
[76]	**C9j.** Emphysema or Chronic Bronchitis	1 ☐ Yes	2 ☐ No	9 ☐ NA
[77]	**C9k.** Stomach Ulcers	1 ☐ Yes	2 ☐ No	9 ☐ NA
[78]	**C9 l.** Arthritis or Rheumatism	1 ☐ Yes	2 ☐ No	9 ☐ NA
[79]	**C9m.** Hepatitis	1 ☐ Yes	2 ☐ No	9 ☐ NA
[80]	**C9 n.** Asthma	1 ☐ Yes	2 ☐ No	9 ☐ NA
[81]	**C9 o.** Thyroid or Other Glandular Problem	1 ☐ Yes	2 ☐ No	9 ☐ NA
[82]	**C9 p.** Physical Disability - Injury	1 ☐ Yes	2 ☐ No	9 ☐ NA
[83]	**C9 q.** Back or Spinal Problems	1 ☐ Yes	2 ☐ No	9 ☐ NA
[84]	**C9 r.** Hayfever or Other Allergies	1 ☐ Yes	2 ☐ No	9 ☐ NA
[85]	**C9 s.** Fetal Alcohol Syndrome	1 ☐ Yes	2 ☐ No	9 ☐ NA
[86]	**C9 t.** Emotional or Behavioral Problems	1 ☐ Yes	2 ☐ No	9 ☐ NA

C10. Has (*name*) had any of the following in the past twelve months?

[87]	C10a. Chest Pain	1 ☐ Yes	2 ☐ No	9 ☐ NA
[88]	C10b. Frequent colds/cough	1 ☐ Yes	2 ☐ No	9 ☐ NA
[89]	C10c. Depression	1 ☐ Yes	2 ☐ No	9 ☐ NA
[90]	C10d. Diarrhea	1 ☐ Yes	2 ☐ No	9 ☐ NA
[91]	* C10e. Drinking Problem	1 ☐ Yes	2 ☐ No	9 ☐ NA
[92]	C10f. Colic	1 ☐ Yes	2 ☐ No	9 ☐ NA
[93]	* C10g. Memory problems	1 ☐ Yes	2 ☐ No	9 ☐ NA
[94]	C10h. Frequent earaches	1 ☐ Yes	2 ☐ No	9 ☐ NA
[95]	C10i. Frequent headaches	1 ☐ Yes	2 ☐ No	9 ☐ NA
	C10l. Flu or fever	1 ☐ Yes	2 ☐ No	9 ☐ NA
	C10m. Frequent upset stomach	1 ☐ Yes	2 ☐ No	9 ☐ NA
	C10n. Skin problems (itching/rashes)	1 ☐ Yes	2 ☐ No	9 ☐ NA
	C10o. Frequent swelling	1 ☐ Yes	2 ☐ No	9 ☐ NA
	C10p. Numbness/loss of feeling	1 ☐ Yes	2 ☐ No	9 ☐ NA

[] **C11.** Within the last twelve months, has (*name*) had any other health problems?

1 ☐ Yes (*specify*)_____

2 ☐ No (*Go to* C13)

[100] **C12.** Has (*name*) consulted a doctor, nurse, health official, traditional healer or counselor about any of <u>these</u> health problems?

1 ☐ Yes (*specify which problems:*)_____

2 ☐ No

[101] **C13.** How would you rate (*name*)'s overall health?

1 ☐ Excellent
2 ☐ Good
3 ☐ Fair
4 ☐ Poor
5 ☐ Very Poor

Sources of Services

C14. Where does (*name*) most frequently go for medical services?

[102-103]   (*Interviewer: Check ONE ONLY; refer respondent to CARD A*)

01 ☐ County Health Department   08 ☐ HMO

02 ☐ Tribal Health Clinic   09 ☐ Tribal Healer

03 ☐ Emergency Room   10 ☐ Other (specify)

04 ☐ Private Doctor

05 ☐ Urban Indian Health Center   11 ☐ Don't use health services

06 ☐ Community Health Clinic   98 ☐ Don't know

07 ☐ Outpatient Medical Center   99 ☐ Refused

Services Used

C15. Has (*name*) used any of the following services during the last twelve months?
(*Interviewer: Check ALL that apply; refer respondent to CARD B*)

		(used)			(used)	
[104]	* a.	☐ Family Planning		m.	☐ Lead Screening	[116]
[105]	* b.	☐ Teen Pregnancy Prevention		n.	☐ Immunizations	[117]
[106]	* c.	☐ Prenatal Care		o.	☐ Dental Services	[118]
[107]	d.	☐ WIC		p.	☐ Home Health Care	[119]
[108]	e.	☐ Maternal and Infant Support		q.	☐ Substance Abuse Services	[120]
[109]	f.	☐ EPSDT		r.	☐ Mental Health Services	[121]
[110]	g.	☐ Crippled Children Services		s.	☐ Social Services	[122]
[111]	h.	☐ Hearing Screening		t.	☐ Traditional Healing Services	[123]
[112]	i.	☐ Vision Screening		u.	☐ Primary Care/Medical Services	[124]
[113]	j.	☐ Visiting Nurse		v.	☐ Homemaker Services	[125]
[114]	k.	☐ Children Day Care	*	w.	☐ Adult Day Care	[126]
[115]	l.	☐ Caregiver Respite Services		x.	☐ CHR's	[127]

(INTERVIEWER: IF NONE OF THE SERVICES LISTED WERE USED, "X" HERE →) 0 ☐ Used none

C16. Are there any services he/she might have used but didn't because they were unavailable?

[128]

1 ☐ Yes (*specify:*)_____ [129]

2 ☐ No

C17-C18. Health Aids

I am going to read a list of provisions many people need. Please tell me for each item, first, if (*name*) needs it and then, if needed, does he/she have it?

C17a. Does (*name*) <u>need</u> a hearing aid?   (*If yes:*) **C18a.** Does he/she <u>have</u> a hearing aid?

		C17 Need			C18 Have	
			(IF YES) →			
30]	**a.** Hearing Aid	1☐ Yes 2☐ No		*(If need hearing...:)*	1☐ Yes 2☐ No	[144]
31]	**b.** Glasses	1☐ Yes 2☐ No		*(If need glasses:)*	1☐ Yes 2☐ No	[145]
32]	**c.** Dentures	1☐ Yes 2☐ No		*(If need dentures:)*	1☐ Yes 2☐ No	[146]
33]	**d.** Support Hose	1☐ Yes 2☐ No		*(If need hose:)*	1☐ Yes 2☐ No	[147]
34]	**e.** Cane	1☐ Yes 2☐ No		*(If need cane:)*	1☐ Yes 2☐ No	[148]
35]	**f.** Walker	1☐ Yes 2☐ No		*(If need walker:)*	1☐ Yes 2☐ No	[149]
36]	**g.** Wheelchair	1☐ Yes 2☐ No		*(If need chair:)*	1☐ Yes 2☐ No	[150]
37]	**h.** Leg Brace	1☐ Yes 2☐ No		*(If need leg brace:)*	1☐ Yes 2☐ No	[151]
38]	**i.** Back Brace	1☐ Yes 2☐ No		*(If need back brace:)*	1☐ Yes 2☐ No	[152]
39]	**j.** Artificial Limb	1☐ Yes 2☐ No		*(If need limb:)*	1☐ Yes 2☐ No	[153]
40]	**k.** Braille Books	1☐ Yes 2☐ No		*(If need braille:)*	1☐ Yes 2☐ No	[154]
41]	**l.** Colostomy Eqpmnt.	1☐ Yes 2☐ No		*(If need colostomy:)*	1☐ Yes 2☐ No	[155]
42]	**m.** Catheter	1☐ Yes 2☐ No		*(If need catheter:)*	1☐ Yes 2☐ No	[156]
43]	**n.** Kidney Dialysis	1☐ Yes 2☐ No		*(If need kidney:)*	1☐ Yes 2☐ No	[157]

Health Coverage

C19. How is (*name*)'s medical treatment paid for? (*Interviewer: refer respondent to CARD C*)

01 ☐ Employee group health policy

02 ☐ Individual policy   [58-159]

03 ☐ Medicaid

04 ☐ Medicare

05 ☐ Urban Indian Health Services

06 ☐ Tribal Contract Health Services

07 ☐ Ontario Health Insurance Plan (OHIP)

08 ☐ No insurance

09 ☐ Other (specify)_____

98 ☐ Don't know

99 ☐ Refused

C20. How much do you estimate is paid out-of-pocket for (*name*)'s medical care <u>yearly</u>? (*Record:*)$_____

[160-163]

(Ask only for household members age 16 or older:)

Occupation

[164] **C21.** Is (*name*) doing any work for pay at the present time, either full-time or part-time?

     1 ☐ Yes *(Go to C21b)*
     2 ☐ No *(Go to C21a)*

[165-166] **C21a.** Is he/she:

     02 ☐ Temporarily Laid Off *(Go to C21b)*
     03 ☐ Unemployed *(Go to C21e)*
     04 ☐ Retired
     05 ☐ Homemaker
     06 ☐ Student
     97 ☐ Other
          (specify) _____

(Go to NEXT HOUSEHOLD MEMBER on next page(26), or to Section D, page 38)

[167-168] **C21b.** What is (*name*)'s occupation? *(Record:)* _____

[169-170] **C21c.** How many hours per (average)week does he/she work for pay?*(Record #hrs. for <u>one</u> week)*____

[171] **C21d.** Is (*name*) employed: 1 ☐ On the reservation
                               2 ☐ By government (Federal/State/Local)
                               3 ☐ Self-employed
                               4 ☐ Private company/business
                               5 ☐ Other *(specify)*_____

(Go to NEXT HOUSEHOLD MEMBER on next page(26), or to Section D, page 38)

[172] **C21e.** *(If unemployed)* Has he/she been out of work for:

     1 ☐ More than one year, or
     2 ☐ Less than one year

(Go to NEXT HOUSEHOLD MEMBER on next page(26), or to Section D, page 38)

C. Individual Profile - 4th Household Member

> *Interviewer: In this section, there are a number of questions about the health of household members, medical care they have received, the facilities that they use for health care, medical insurance, and employment. These questions are to be answered for each member of the household individually. Certain items do not apply to young children. <u>When inquiring about household members under 10 years old,</u> do not ask questions preceded by an asterisk (*).*

Now I would like to ask you some questions about the next member of the household, who is (*name*), listed as 04 on our list of household members.

Name of household member 04 _____

Risk Factors

[48]   C1. How often does (*name*) participate in any sports or activity for at least 20-30 minutes? (For example, hiking, fast walking, jogging, swimming, wood cutting, dancing, skating, biking.)

     1 ☐ At least 3 times a week
     2 ☐ 1-2 times a week
     3 ☐ 1-3 times a month
     4 ☐ Less than once a month
     5 ☐ Never

[49]   C2. Is (*name*) trying to lose weight? *(IF NO, GO TO C3)*   1 ☐ Yes   2 ☐ No

[50-52]   C2a. *(If yes)* How much is he/she trying to lose? _____
                                                   (pounds)

[53]   * C3. Does (*name*) smoke cigarettes? *(IF NO, GO TO C4)*   1 ☐ Yes   2 ☐ No

[54]   * C3a. *(If yes:)* More than three (3) cigarettes every day?   1 ☐ Yes   2 ☐ No

[55-56]   * C3b. *(If yes:)* How many cigarettes/packs per day? _____
                                                 (packs)

[57]   * C4. Does (*name*) drink wine, beer, or liquor? *(IF NO, GO TO C5)*   1 ☐ Yes   2 ☐ No

[58-59]   * C4a. *(If yes:)* How many times did he/she drink over the last 30 days? _____ (number of times)

[60-61]   * C4b. On average, how many drinks did he/she have per time?
            (*Drink*=a can of beer, 4 oz. wine or 1 shot of liquor)
            (enter response) _____
                               (number of drinks)

[62]   C5. Has (*name*) had a physical check-up within the last twelve months?   1 ☐ Yes   2 ☐ No

[63]   * C6. Has (*name*)'s knowledge about AIDS increased? *(IF NO, GO TO C7)*   1 ☐ Yes   2 ☐ No

[64]   *   C6a. Has this knowledge changed his/her behavior in any way?   1 ☐ Yes   2 ☐ No

[65]   **C7.** Does (*name*) try to watch his/her cholesterol or fat intake?   1 ☐ Yes   2 ☐ No

[66]   **C8.** Is he/she on a special diet?   1 ☐ Yes   2 ☐ No

Physical Health

C9. In the last twelve months, has (*name*) been told by a doctor, nurse, health official, traditional healer or counselor that he/she has any of the following conditions?

[67]	**C9a.** Heart Disease	1 ☐ Yes	2 ☐ No	9 ☐ NA
[68]	**C9b.** Stroke/Effects of Stroke	1 ☐ Yes	2 ☐ No	9 ☐ NA
[69]	**C9c.** High Blood Pressure	1 ☐ Yes	2 ☐ No	9 ☐ NA
[70]	**C9d.** Diabetes	1 ☐ Yes	2 ☐ No	9 ☐ NA
[71]	**C9e.** High Cholesterol	1 ☐ Yes	2 ☐ No	9 ☐ NA
[72]	**C9f.** Tuberculosis	1 ☐ Yes	2 ☐ No	9 ☐ NA
[73]	**C9g.** Kidney Disease	1 ☐ Yes	2 ☐ No	9 ☐ NA
[74]	**C9h.** Chronic Liver Disease	1 ☐ Yes	2 ☐ No	9 ☐ NA
[75]	**C9i.** Cancer (including leukemia)	1 ☐ Yes	2 ☐ No	9 ☐ NA

Specify type: _____

[76]	**C9j.** Emphysema or Chronic Bronchitis	1 ☐ Yes	2 ☐ No	9 ☐ NA
[77]	**C9k.** Stomach Ulcers	1 ☐ Yes	2 ☐ No	9 ☐ NA
[78]	**C9 l.** Arthritis or Rheumatism	1 ☐ Yes	2 ☐ No	9 ☐ NA
[79]	**C9m.** Hepatitis	1 ☐ Yes	2 ☐ No	9 ☐ NA
[80]	**C9n.** Asthma	1 ☐ Yes	2 ☐ No	9 ☐ NA
[81]	**C9o.** Thyroid or Other Glandular Problem	1 ☐ Yes	2 ☐ No	9 ☐ NA
[82]	**C9p.** Physical Disability - Injury	1 ☐ Yes	2 ☐ No	9 ☐ NA
[83]	**C9q.** Back or Spinal Problems	1 ☐ Yes	2 ☐ No	9 ☐ NA
[84]	**C9r.** Hayfever or Other Allergies	1 ☐ Yes	2 ☐ No	9 ☐ NA
[85]	**C9s.** Fetal Alcohol Syndrome	1 ☐ Yes	2 ☐ No	9 ☐ NA
[86]	**C9t.** Emotional or Behavioral Problems	1 ☐ Yes	2 ☐ No	9 ☐ NA

C10. Has (name) had any of the following in the past twelve months?

[87]	C10a. Chest Pain	1 ☐ Yes	2 ☐ No	9 ☐ NA
[88]	C10b. Frequent colds/cough	1 ☐ Yes	2 ☐ No	9 ☐ NA
[89]	C10c. Depresson	1 ☐ Yes	2 ☐ No	9 ☐ NA
[90]	C10d. Diarrhea	1 ☐ Yes	2 ☐ No	9 ☐ NA
[91]	C10e. Drinking Problem	1 ☐ Yes	2 ☐ No	9 ☐ NA
[92]	C10f. Colic	1 ☐ Yes	2 ☐ No	9 ☐ NA
[93]	C10g. Memory problems	1 ☐ Yes	2 ☐ No	9 ☐ NA
[94]	C10h. Frequent earaches	1 ☐ Yes	2 ☐ No	9 ☐ NA
[95]	C10i. Frequent headaches	1 ☐ Yes	2 ☐ No	9 ☐ NA
	C10j. Dehydration	1 ☐ Yes	2 ☐ No	9 ☐ NA
	C10k. Pain in joints	1 ☐ Yes	2 ☐ No	9 ☐ NA
	C10l. Flu or fever	1 ☐ Yes	2 ☐ No	9 ☐ NA
	C10m. Frequent upset stomach	1 ☐ Yes	2 ☐ No	9 ☐ NA
	C10n. Skin problems (itching/rashes)	1 ☐ Yes	2 ☐ No	9 ☐ NA
	C10o. Frequent swelling	1 ☐ Yes	2 ☐ No	9 ☐ NA
	C10p. Numbness/loss of feeling	1 ☐ Yes	2 ☐ No	9 ☐ NA

[] C11. Within the last twelve months, has (name) had any other health problems?

1 ☐ Yes (specify)_____

2 ☐ No (Go to C13)

[100] C12. Has (name) consulted a doctor, nurse, health official, traditional healer or counselor about any of these health problems?

1 ☐ Yes (specify which problems:)_____

2 ☐ No

[101] C13. How would you rate (name)'s overall health? (Read choices)

1 ☐ Excellent
2 ☐ Good
3 ☐ Fair
4 ☐ Poor
5 ☐ Very Poor

Sources of Services

C14. Where does (*name*) most frequently go for medical services?

[102-103] (*Interviewer: Check ONE ONLY; refer respondent to CARD A*)

01 ☐ County Health Department   08 ☐ HMO

02 ☐ Tribal Health Clinic   09 ☐ Tribal Healer

03 ☐ Emergency Room   10 ☐ Other (specify)

04 ☐ Private Doctor

05 ☐ Urban Indian Health Center   11 ☐ Don't use health services

06 ☐ Community Health Clinic   98 ☐ Don't know

07 ☐ Outpatient Medical Center   99 ☐ Refused

Services Used

C15. Has (*name*) used any of the following services during the last twelve months?
(*Interviewer: Check ALL that apply; refer respondent to CARD B*)

		(used)				(used)	
[104]	* a.	☐	Family Planning	m.	☐	Lead Screening	[116]
[105]	* b.	☐	Teen Pregnancy Prevention	n.	☐	Immunizations	[117]
[106]	* c.	☐	Prenatal Care	o.	☐	Dental Services	[118]
[107]	d.	☐	WIC	p.	☐	Home Health Care	[119]
[108]	e.	☐	Maternal and Infant Support	q.	☐	Substance Abuse Services	[120]
[109]	f.	☐	EPSDT	r.	☐	Mental Health Services	[121]
[110]	g.	☐	Crippled Children Services	s.	☐	Social Services	[122]
[111]	h.	☐	Hearing Screening	t.	☐	Traditional Healing Services	[123]
[112]	i.	☐	Vision Screening	u.	☐	Primary Care/Medical Services	[124]
[113]	j.	☐	Visiting Nurse	v.	☐	Homemaker Services	[125]
[114]	k.	☐	Children Day Care	* w.	☐	Adult Day Care	[126]
[115]	l.	☐	Caregiver Respite Services	x.	☐	CHR's	[127]

(*INTERVIEWER: IF NONE OF THE SERVICES LISTED WERE USED, "X" HERE* →)   0 ☐ Used none

C16. Are there any services he/she might have used but didn't because they were unavailable?

[128]

1 ☐ Yes (*specify:*)_____ [129]

2 ☐ No

C17-C18. Health Aids

I am going to read a list of provisions many people need. Please tell me for each item, first, if (*name*) needs it and then, if needed, does he/she **have** it?

C17a. Does (*name*) **need** a hearing aid? (*If yes:*) C18a. Does he/she **have** a hearing aid?

			C17 Need				C18 Have		
					(IF YES) →				
[130]	a. Hearing Aid	1 ☐ Yes	2 ☐ No	(*If need hearing....:*)	1 ☐ Yes	2 ☐ No	[144]
[131]	b. Glasses	1 ☐ Yes	2 ☐ No	(*If need glasses:*)	1 ☐ Yes	2 ☐ No	[145]
[132]	c. Dentures	1 ☐ Yes	2 ☐ No	(*If need dentures:*)	1 ☐ Yes	2 ☐ No	[146]
[133]	d. Support Hose	1 ☐ Yes	2 ☐ No	(*If need hose:*)	1 ☐ Yes	2 ☐ No	[147]
[134]	e. Cane	1 ☐ Yes	2 ☐ No	(*If need cane:*)	1 ☐ Yes	2 ☐ No	[148]
[135]	f. Walker	1 ☐ Yes	2 ☐ No	(*If need walker:*)	1 ☐ Yes	2 ☐ No	[149]
[136]	g. Wheelchair	1 ☐ Yes	2 ☐ No	(*If need chair:*)	1 ☐ Yes	2 ☐ No	[150]
[137]	h. Leg Brace	1 ☐ Yes	2 ☐ No	(*If need leg brace:*)	1 ☐ Yes	2 ☐ No	[151]
[138]	i. Back Brace	1 ☐ Yes	2 ☐ No	(*If need back brace:*)	1 ☐ Yes	2 ☐ No	[152]
[139]	j. Artificial Limb	1 ☐ Yes	2 ☐ No	(*If need limb:*)	1 ☐ Yes	2 ☐ No	[153]
[140]	k. Braille Books	1 ☐ Yes	2 ☐ No	(*If need braille:*)	1 ☐ Yes	2 ☐ No	[154]
[141]	l. Colostomy Eqpmnt.	1 ☐ Yes	2 ☐ No	(*If need colostomy:*)	1 ☐ Yes	2 ☐ No	[155]
[142]	m. Catheter	1 ☐ Yes	2 ☐ No	(*If need catheter:*)	1 ☐ Yes	2 ☐ No	[156]
[143]	n. Kidney Dialysis	1 ☐ Yes	2 ☐ No	(*If need kidney:*)	1 ☐ Yes	2 ☐ No	[157]

Health Coverage

C19. How is (*name*)'s medical treatment paid for? (*Interviewer: refer respondent to CARD C*)

[158-159]

01 ☐ Employee group health policy

02 ☐ Individual policy

03 ☐ Medicaid

04 ☐ Medicare

05 ☐ Urban Indian Health Services

06 ☐ Tribal Contract Health Services

07 ☐ Ontario Health Insurance Plan (OHIP)

08 ☐ No insurance

09 ☐ Other

(specify)_____

98 ☐ Don't know

99 ☐ Refused

C20. How much do you estimate is paid out-of-pocket for (*name*)'s medical care **yearly**? (*Record:*)$_____

[160-163]

(Ask only for household members age 16 or older:)

Occupation

[164]   **C21.** Is *(name)* doing any work for pay at the present time, either full-time or part-time?

    1 ☐ Yes *(Go to C21b)*
    2 ☐ No   *(Go to C21a)*

[165-166]   **C21a.** Is he/she:

        02 ☐ Temporarily Laid Off *(Go to C21b)*
        03 ☐ Unemployed *(Go to C21e)*
        04 ☐ Retired
        05 ☐ Homemaker
        06 ☐ Student   *(Go to NEXT HOUSEHOLD*
        97 ☐ Other   *MEMBER on next page(32),*
            (specify) _____   *or to Section D, page 38)*

[167-168]   **C21b.** What is *(name)*'s occupation? *(Record:)* _____

[169-170]   **C21c.** How many hours per (average)week does he/she work for pay?*(Record #hrs. for* <u>one</u> *week)*_____

[171]   **C21d.** Is *(name)* employed: 1 ☐ Private company/business
                                         2 ☐ By government (Federal/State/Local)
                                         3 ☐ Self-employed   *(Go to NEXT HOUSEHOLD*
                                         4 ☐ On the reservation   *MEMBER on next page(32),*
                                         5 ☐ Other (specify)_____   *or to Section D, page 38)*

[172]   **C21e.** *(If unemployed)* Has he/she been out of work for:

            1 ☐ More than one year, or
            2 ☐ Less than one year

(Go to NEXT HOUSEHOLD MEMBER on next page(32), or to Section D, page 38)

C. Individual Profile - 5thHousehold Member

> *Interviewer: In this section, there are a number of questions about the health of household members, medical care they have received, the facilities that they use for health care, medical insurance, and employment. These questions are to be answered for each member of the household individually. Certain items do not apply to young children. When inquiring about household members under 10 years old, do not ask questions preceded by an asterisk (*).*

Now I would like to ask you some questions about the next member of the household, who is (*name*), listed as 05 on our list of household members.

Name of household member 05 _____

Risk Factors

[48]   C1. How often does (*name*) participate in any sports or activity for at least 20-30 minutes? (For example, hiking, fast walking, jogging, swimming, wood cutting, dancing, skating, biking.)

    1 ☐ At least 3 times a week
    2 ☐ 1-2 times a week
    3 ☐ 1-3 times a month
    4 ☐ Less than once a month
    5 ☐ Never

[49]   C2. Is (*name*) trying to lose weight? (*IF NO, GO TO C3*)   1 ☐ Yes 2 ☐ No

[50-52]   C2a. (*If yes*)How much is he/she trying to lose? _____
                                               (pounds)

[53]   * C3. Does (*name*) smoke cigarettes? (*IF NO, GO TO C4*)   1 ☐ Yes 2 ☐ No

[54]   * C3a. (*If yes:*) More than three (3) cigarettes every day?   1 ☐ Yes 2 ☐ No

[55-56]   * C3b. (*If yes:*) How many cigarettes/packs per day? _____
                                            (packs)

[57]   * C4. Does (*name*) drink wine, beer, or liquor? (*IF NO, GO TO C5*)   1 ☐ Yes 2 ☐ No

[58-59]   * C4a. (*If yes:*)How many times did he/she drink over the last 30 days? _____(number of times)

[60-61]   * C4b. On average, how many drinks did he/she have per time?
        (*Drink*=a can of beer, 4 oz. wine or 1 shot of liquor)
        (enter response) _____
                       (number of drinks)

[62]   C5. Has (*name*) had a physical check-up within the last twelve months?   1 ☐ Yes 2 ☐ No

[63]   * C6. Has (*name*)'s knowledge about AIDS increased? (*IF NO, GO TO C7*)   1 ☐ Yes 2 ☐ No

[64]   *   C6a. Has this knowledge changed his/her behavior in any way?   1 ☐ Yes 2 ☐ No

[65]   **C7.** Does (*name*) try to watch his/her cholesterol or fat intake?   1 ☐ Yes   2 ☐ No

[66]   **C8.** Is he/she on a special diet?   1 ☐ Yes   2 ☐ No

Physical Health

C9. In the **past twelve months**, has (*name*) been told by a doctor, nurse, health official, traditional healer or counselor that he/she has any of the following conditions?

[67]	**C9a.** Heart Disease	1 ☐ Yes	2 ☐ No	9 ☐ NA
[68]	**C9b.** Stroke/Effects of Stroke	1 ☐ Yes	2 ☐ No	9 ☐ NA
[69]	**C9c.** High Blood Pressure	1 ☐ Yes	2 ☐ No	9 ☐ NA
[70]	**C9d.** Diabetes	1 ☐ Yes	2 ☐ No	9 ☐ NA
[71]	**C9e.** High Cholesterol	1 ☐ Yes	2 ☐ No	9 ☐ NA
[72]	**C9f.** Tuberculosis	1 ☐ Yes	2 ☐ No	9 ☐ NA
[73]	**C9g.** Kidney Disease	1 ☐ Yes	2 ☐ No	9 ☐ NA
[74]	**C9h.** Chronic Liver Disease	1 ☐ Yes	2 ☐ No	9 ☐ NA
[75]	**C9i.** Cancer (including leukemia)	1 ☐ Yes	2 ☐ No	9 ☐ NA

                          Specify type: _____

[76]	**C9j.** Emphysema or Chronic Bronchitis	1 ☐ Yes	2 ☐ No	9 ☐ NA
[77]	**C9k.** Stomach Ulcers	1 ☐ Yes	2 ☐ No	9 ☐ NA
[78]	**C9 l.** Arthritis or Rheumatism	1 ☐ Yes	2 ☐ No	9 ☐ NA
[79]	**C9m.** Hepatitis	1 ☐ Yes	2 ☐ No	9 ☐ NA
[80]	**C9 n.** Asthma	1 ☐ Yes	2 ☐ No	9 ☐ NA
[81]	**C9 o.** Thyroid or Other Glandular Problem	1 ☐ Yes	2 ☐ No	9 ☐ NA
[82]	**C9 p.** Physical Disability - Injury	1 ☐ Yes	2 ☐ No	9 ☐ NA
[83]	**C9 q.** Back or Spinal Problems	1 ☐ Yes	2 ☐ No	9 ☐ NA
[84]	**C9 r.** Hayfever or Other Allergies	1 ☐ Yes	2 ☐ No	9 ☐ NA
[85]	**C9 s.** Fetal Alcohol Syndrome	1 ☐ Yes	2 ☐ No	9 ☐ NA
[86]	**C9 t.** Emotional or Behavioral Problems	1 ☐ Yes	2 ☐ No	9 ☐ NA

C10. Has (*name*) had any of the following in the past twelve months?

[87]	**C10a.** Chest Pain	1 ☐ Yes	2 ☐ No	9 ☐ NA
[88]	**C10b.** Frequent colds/cough	1 ☐ Yes	2 ☐ No	9 ☐ NA
[89]	**C10c.** Depression	1 ☐ Yes	2 ☐ No	9 ☐ NA
[90]	**C10d.** Diarrhea	1 ☐ Yes	2 ☐ No	9 ☐ NA
[91]	* **C10e.** Drinking Problem	1 ☐ Yes	2 ☐ No	9 ☐ NA
[92]	**C10f.** Colic	1 ☐ Yes	2 ☐ No	9 ☐ NA
[93]	* **C10g.** Memory problems	1 ☐ Yes	2 ☐ No	9 ☐ NA
[94]	**C10h.** Frequent earaches	1 ☐ Yes	2 ☐ No	9 ☐ NA
[95]	**C10i.** Frequent headaches	1 ☐ Yes	2 ☐ No	9 ☐ NA
	C10l. Flu or fever	1 ☐ Yes	2 ☐ No	9 ☐ NA
	C10m. Frequent upset stomach	1 ☐ Yes	2 ☐ No	9 ☐ NA
	C10n. Skin problems (itching/rashes)	1 ☐ Yes	2 ☐ No	9 ☐ NA
	C10o. Frequent swelling	1 ☐ Yes	2 ☐ No	9 ☐ NA
	C10p. Numbness/loss of feeling	1 ☐ Yes	2 ☐ No	9 ☐ NA

[] **C11.** Within the **last twelve months**, has (*name*) had any other health problems?

    1 ☐ Yes (*specify*)_____

    2 ☐ No (*Go to* **C13**)

[100] **C12.** Has (*name*) consulted a doctor, nurse, health official, traditional healer or counselor about any of <u>these</u> health problems?

    1 ☐ Yes (*specify which problems:*)_____

    2 ☐ No

[101] **C13.** How would you rate (*name*)'s overall health? (*Read choices*)

    1 ☐ Excellent
    2 ☐ Good
    3 ☐ Fair
    4 ☐ Poor
    5 ☐ Very Poor

Sources of Services

C14. Where does (*name*) most frequently go for medical services?

[102-103]   (*Interviewer: Check ONE ONLY; refer respondent to CARD A*)

01 ☐ County Health Department   08 ☐ HMO

02 ☐ Tribal Health Clinic   09 ☐ Tribal Healer

03 ☐ Emergency Room   10 ☐ Other (specify)

04 ☐ Private Doctor   _____

05 ☐ Urban Indian Health Center   11 ☐ Don't use health services

06 ☐ Community Health Clinic   98 ☐ Don't know

07 ☐ Outpatient Medical Center   99 ☐ Refused

Services Used

C15. Has (*name*) used any of the following services during the last twelve months?
(*Interviewer: Check ALL that apply; refer respondent to CARD B*)

			(used)				(used)	
[104]	*	a.	☐ Family Planning		m.	☐ Lead Screening		[116]
[105]	*	b.	☐ Teen Pregnancy Prevention		n.	☐ Immunizations		[117]
[106]	*	c.	☐ Prenatal Care		o.	☐ Dental Services		[118]
[107]		d.	☐ WIC		p.	☐ Home Health Care		[119]
[108]		e.	☐ Maternal and Infant Support		q.	☐ Substance Abuse Services		[120]
[109]		f.	☐ EPSDT		r.	☐ Mental Health Services		[121]
[110]		g.	☐ Crippled Children Services		s.	☐ Social Services		[122]
[111]		h.	☐ Hearing Screening		t.	☐ Traditional Healing Services		[123]
[112]		i.	☐ Vision Screening		u.	☐ Primary Care/Medical Services		[124]
[113]		j.	☐ Visiting Nurse		v.	☐ Homemaker Services		[125]
[114]		k.	☐ Children Day Care	*	w.	☐ Adult Day Care		[126]
[115]		l.	☐ Caregiver Respite Services		x.	☐ CHR's		[127]

(INTERVIEWER: IF NONE OF THE SERVICES LISTED WERE USED, "X" HERE →) 0 ☐ Used none

C16. Are there any services he/she might have used but didn't because they were unavailable?

[128]

1 ☐ Yes (*specify:*)_____ [129]

2 ☐ No

C17-C18. Health Aids

I am going to read a list of provisions many people need. Please tell me for each item, first, if (*name*) needs it and then, if needed, does he/she **have** it?

C17a. Does (*name*) <u>need</u> a hearing aid?　　　　　　　(*If yes:*) C18a. Does he/she <u>have</u> a hearing aid?

		C17 Need			C18 Have		
			(IF YES) →				
30]	**a.** Hearing Aid	1☐ Yes	2☐ No	*(If need hearing...:)*	1☐ Yes	2☐ No	[144]
31]	**b.** Glasses	1☐ Yes	2☐ No	*(If need glasses:)*	1☐ Yes	2☐ No	[145]
32]	**c.** Dentures	1☐ Yes	2☐ No	*(If need dentures:)*	1☐ Yes	2☐ No	[146]
33]	**d.** Support Hose	1☐ Yes	2☐ No	*(If need hose:)*	1☐ Yes	2☐ No	[147]
34]	**e.** Cane	1☐ Yes	2☐ No	*(If need cane:)*	1☐ Yes	2☐ No	[148]
35]	**f.** Walker	1☐ Yes	2☐ No	*(If need walker:)*	1☐ Yes	2☐ No	[149]
36]	**g.** Wheelchair	1☐ Yes	2☐ No	*(If need chair:)*	1☐ Yes	2☐ No	[150]
37]	**h.** Leg Brace	1☐ Yes	2☐ No	*(If need leg brace:)*	1☐ Yes	2☐ No	[151]
38]	**i.** Back Brace	1☐ Yes	2☐ No	*(If need back brace:)*	1☐ Yes	2☐ No	[152]
39]	**j.** Artificial Limb	1☐ Yes	2☐ No	*(If need limb:)*	1☐ Yes	2☐ No	[153]
40]	**k.** Braille Books	1☐ Yes	2☐ No	*(If need braille:)*	1☐ Yes	2☐ No	[154]
41]	**l.** Colostomy Eqpmnt.	1☐ Yes	2☐ No	*(If need colostomy:)*	1☐ Yes	2☐ No	[155]
42]	**m.** Catheter	1☐ Yes	2☐ No	*(If need catheter:)*	1☐ Yes	2☐ No	[156]
43]	**n.** Kidney Dialysis	1☐ Yes	2☐ No	*(If need kidney:)*	1☐ Yes	2☐ No	[157]

Health Coverage

C19. How is (*name*)'s medical treatment paid for? (*Interviewer: refer respondent to CARD C*)

01 ☐ Employee group health policy

58-159]　02 ☐ Individual policy

03 ☐ Medicaid

04 ☐ Medicare

05 ☐ Urban Indian Health Services

06 ☐ Tribal Contract Health Services

07 ☐ Ontario Health Insurance Plan (OHIP)

08 ☐ No insurance

09 ☐ Other (specify)_____

98 ☐ Don't know

99 ☐ Refused

C20. How much do you estimate is paid out-of-pocket for (*name*)'s medical care <u>yearly</u>? (*Record:*)$_____

[160-163]

(Ask only for household members age 16 or older:)

Occupation

[164] **C21.** Is (*name*) doing any work for pay at the present time, either full-time or part-time?

1 ☐ Yes   (*Go to* C21b)
2 ☐ No   (*Go to* C21a)

[165-166] **C21a.** Is he/she:

02 ☐ Temporarily Laid Off (*Go to* C21b)
03 ☐ Unemployed   (*Go to* C21e)
04 ☐ Retired
05 ☐ Homemaker
06 ☐ Student
97 ☐ Other

(specify) _____

[Go to NEXT HOUSEHOLD MEMBER (Supplemental Records), or to Section D, next page (38)]

[167-168] **C21b.** What is (*name*)'s occupation? (*Record:*) _____

[169-170] **C21c.** How many hours per (average)week does he/she work for pay?(*Record #hrs. for one week*)____

[171] **C21d.** Is (*name*) employed:
1 ☐ On the reservation
2 ☐ By government (Federal/State/Local)
3 ☐ Self-employed
4 ☐ Private company/business
5 ☐ Other (*specify*)_____

[Go to NEXT HOUSEHOLD MEMBER (Supplemental Record), or to Section D, next page (38)]

[172] **C21e.** (*If unemployed*) Has he/she been out of work for:

1 ☐ More than one year, or
2 ☐ Less than one year

(Go to NEXT HOUSEHOLD MEMBER (Supplemental Record, or to Section D, next page (38)

D. Service Barriers and Community Problems

		True all the time	True most of the time	True some times	Not true most of the time	Never true
[187]	D1. In an emergency, I can get medical care quickly.	5☐	4☐	3☐	2☐	1☐
[188]	D2. I worry about the cost of medical care a great deal.	5☐	4☐	3☐	2☐	1☐
[189]	D3. The staff at the doctor's office or clinic do not show understanding and respect for me as a person.	5☐	4☐	3☐	2☐	1☐
[190]	D4. The hours the doctor's office or clinic is open are convenient for me.	5☐	4☐	3☐	2☐	1☐
[191]	D5. When I have an appointment, I usually have to wait more than 45 minutes to see the doctor or nurse.	5☐	4☐	3☐	2☐	1☐
[192]	D6. There are enough medical specialists in the community.	5☐	4☐	3☐	2☐	1☐
[193]	D7. I'm satisfied with the medical care I receive.	5☐	4☐	3☐	2☐	1☐
[194]	D8. Places where I can get medical care are too far away for me to travel to easily.	5☐	4☐	3☐	2☐	1☐
[195]	D9. If I have a medical or health question, I know whom to ask.	5☐	4☐	3☐	2☐	1☐
[196]	D10. Arranging for transportation is a problem.	5☐	4☐	3☐	2☐	1☐
[197]	D11. It does not matter to me whether the doctor is a Native American or not.	5☐	4☐	3☐	2☐	1☐
[198]	D12. The visiting nurse program has been very helpful to me and my family.	5☐	4☐	3☐	2☐	1☐
[199]	D13. My children go to the doctor for yearly check-ups.	5☐	4☐	3☐	2☐	1☐

		True most of the time	True some times	Not true most of the time	Never true
		True all the time				

[200] **D14.** I get a medical check-up yearly.   5☐   4☐   3☐   2☐   1☐

[201] **D15.** For most problems, I consult a traditional healer first.   5☐   4☐   3☐   2☐   1☐

[202] **D16.** My friends tell me what services are available to help me.   5☐   4☐   3☐   2☐   1☐

[203] **D17.** I would prefer health and medical services to be provided by a tribal or Indian agency.   5☐   4☐   3☐   2☐   1☐

[204] **D18.** I am uncomfortable with the health and medical services that I use now.   5☐   4☐   3☐   2☐   1☐

[205] **D19.** Medical and nursing staff who are not Native American do not understand Native Americans.   5☐   4☐   3☐   2☐   1☐

D20. Other Social Concerns

Now I am going to ask you the extent to which you think that the following issues are a problem in your community. Please indicate whether you think each item is a serious problem, somewhat a problem, or not a problem at all.

			Serious problem	Somewhat a problem	Not a problem	Don't Know
[206]	**D20a.**	Violence in the home	3 ☐	2 ☐	1 ☐	☐ 8
[207]	**D20b.**	Sexual abuse of children	3 ☐	2 ☐	1 ☐	☐ 8
[208]	**D20c.**	Truancy of children	3 ☐	2 ☐	1 ☐	☐ 8
[209]	**D20d.**	Alcoholism of teenagers	3 ☐	2 ☐	1 ☐	☐ 8
[210]	**D20e.**	Alcoholism of adults	3 ☐	2 ☐	1 ☐	☐ 8
[211]	**D20f.**	Drug abuse by teenagers	3 ☐	2 ☐	1 ☐	☐ 8
[212]	**D20g.**	Drug abuse by adults	3 ☐	2 ☐	1 ☐	☐ 8
[213]	**D20h.**	Out of control children	3 ☐	2 ☐	1 ☐	☐ 8
[214]	**D20i.**	AIDS	3 ☐	2 ☐	1 ☐	☐ 8
[215]	**D20j.**	Other infectious diseases (such as tuberculosis)	3 ☐	2 ☐	1 ☐	☐ 8
[216]	**D20k.**	Unemployment	3 ☐	2 ☐	1 ☐	☐ 8
[217]	**D20l.**	Teenage pregnancy	3 ☐	2 ☐	1 ☐	☐ 8
[218]	**D20m.**	Reckless driving	3 ☐	2 ☐	1 ☐	☐ 8
[219]	**D20n.**	Depression	3 ☐	2 ☐	1 ☐	☐ 8
[220]	**D20o.**	Care of the elderly	3 ☐	2 ☐	1 ☐	☐ 8
[221]	**D20p.**	Maintaining Native American culture	3 ☐	2 ☐	1 ☐	☐ 8
[222]	**D20q.**	Crime/unsafe streets	3 ☐	2 ☐	1 ☐	☐ 8
[223]	**D20r.**	Racism or ethnic bias/ Prejudice	3 ☐	2 ☐	1 ☐	☐ 8

We are now near the end of the survey. You could help us by answering just a few more questions.

D21. What is your religious preference?

[224]

1 ☐ Native American   5 ☐ Jewish

2 ☐ Protestant   6 ☐ Non-Denominational Christian

3 ☐ Catholic   7 ☐ Other (*specify*)_____

4 ☐ Baptist   8 ☐ No Preference or Don't Know

		Yes	No
[225]	**D22.** Does anyone in this household receive food stamps or USDA commodity foods?	1 ☐	2 ☐

D23. I am going to read you some sources of income and other types of assistance. Please tell me if you <u>or anyone in the household</u> receive any money from these sources.

		Yes	No				Yes	No
[226]	a. A job	1 ☐	2 ☐	[234]	i. Food stamps		1 ☐	2 ☐
[227]	b. Social Security	1 ☐	2 ☐	[235]	j. General Assistance (GA)		1 ☐	2 ☐
[228]	c. Supplementary Security Income (SSI)	1 ☐	2 ☐	[236]	k. Aid to Dependent Children (ADC)		1 ☐	2 ☐
[229]	d. Veteran's benefits	1 ☐	2 ☐	[237]	l. Relatives		1 ☐	2 ☐
[230]	e. Other retirement pensions	1 ☐	2 ☐	[238]	m. Housing Assistance		1 ☐	2 ☐
[231]	f. Workers' compensation	1 ☐	2 ☐	[239]	n. Energy Assistance		1 ☐	2 ☐
[232]	g. Disability insurance	1 ☐	2 ☐	[240]	o. Indian money		1 ☐	2 ☐
[233]	h. Income from stocks, bonds, insurance, real estate, interest or savings	1 ☐	2 ☐	[241]	p. Other (*specify*) _____		1 ☐	2 ☐

D24. Which of the categories on CARD E best describes your annual household income from all sources, before taxes? Please read the categories and tell me the appropriate code number.

(Interviewer: Refer to CARD E and check the appropriate response.)

01 ☐ Less than $5,000
02 ☐ $5,000 to less than $10,000
03 ☐ $10,000 to less than $15,000
04 ☐ $15,000 to less than $20,000
[242-243]   05 ☐ $20,000 to less than $25,000
06 ☐ $25,000 to less than $35,000
07 ☐ $35,000 to less than $50,000
08 ☐ $50,000 or more
98 ☐ Don't know/ not sure
99 ☐ Refused

D25. Could you tell me how many cars or trucks are used regularly by you or anyone else living in your home/apartment?

1 ☐ None available
2 ☐ One
[244]   3 ☐ Two
4 ☐ Three or more

D26. Do you or anyone living in your household have a current driver's license?

1 ☐ No one
[245]   2 ☐ Yes - someone other than the respondent
3 ☐ Yes - respondent
4 ☐ Yes - respondent + other(s)

____:____ **TIME NOW**

(Interviewer: Please read the following to the respondent.)

This concludes the health survey. Thank you for helping us. The information you provided is important and will be kept confidential. Do you have any other health issues or concerns you would like to mention?

_____

_____

_____

_____

_____

_____

If you have any questions about the survey, please call _____ at _____. *(Add name and phone number.)* Thank you again for you help.

(INTERVIEWER REMINDER): GO BACK TO COVER SHEET
AND COMPLETE QUESTIONS 4 THROUGH 6
WITH THE RESPONDENT.

(AFTER THE COVER SHEET; DON'T FORGET THE INTERVIEWER ASSESSMENT, SECTION E.)

E. INTERVIEWER ASSESSMENT

(Do not do this in the presence of the respondent.
Please take the time to fill in this section after you have
finished the interview, but while the information is still fresh.)

E1. Observation of Respondent

a.
1 ☐ Very fatigued
2 ☐ Somewhat fatigued   [246]
3 ☐ Not fatigued
4 ☐ Can't determine

[248] c.
1 ☐ Very cooperative
2 ☐ Somewhat cooperative
3 ☐ Uncooperative
4 ☐ Can't determine

b.
1 ☐ Very disoriented (mental condition)
2 ☐ Somewhat disoriented   [247]
3 ☐ Normal
4 ☐ Can't determine

We are interested in your observations about both the living conditions of the house and the situation in which the interview took place.

E2. How would you rate the respondent's need in regard to:

		Very needy	Somewhat Needy	Not very needy	No need
[249]	a. Physical Health/Medical care	3 ☐	2 ☐	1 ☐	0 ☐
[250]	b. Mental Health	3 ☐	2 ☐	1 ☐	0 ☐
[251]	c. Transportation	3 ☐	2 ☐	1 ☐	0 ☐
[252]	d. Social support (family, friends, activities, companionship, etc.)	3 ☐	2 ☐	1 ☐	0 ☐
[253]	e. Activities of Daily Living Needs [In-home services to stay independent (homemaker services, chore, access to help)]	3 ☐	2 ☐	1 ☐	0 ☐
[254]	f. Economic Resources	3 ☐	2 ☐	1 ☐	0 ☐

E3. Write a brief "thumbnail" sketch of the interview situation (include unusual circumstances, presence of others, where interview was conducted):

_____

_____

_____